2-5-77 - Footage location change to: 2193 FSL & 78 FWL
5-20-77 SI Gas Storage

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

RECEIVED
FEB 16 1977
DIVISION OF OIL, GAS, & MINING

5. LEASE DESIGNATION AND SERIAL NO.: SL - 045051 a

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: -

1a. TYPE OF WORK: DRILL [x] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [ ] OTHER Gas Storage SINGLE ZONE [ ] MULTIPLE ZONE [ ]

7. UNIT AGREEMENT NAME: Clay Basin Gas Storage Agreement

8. FARM OR LEASE NAME: Unit Well

2. NAME OF OPERATOR: Mountain Fuel Resources, Inc.

9. WELL NO.: 32-S

3. ADDRESS OF OPERATOR: P. O. Box 1129, Rock Springs, Wyoming 82901

10. FIELD AND POOL, OR WILDCAT: Clay Basin Gas Storage

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 2150' FSL 500' FWL NW SW

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: NW SW 22-3N-24E

At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 40-1/2 miles south of Rock Springs, Wyoming

12. COUNTY OR PARISH: Daggett

13. STATE: Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	500' -	16. NO. OF ACRES IN LEASE 640	17. NO. OF ACRES ASSIGNED TO THIS WELL -
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	1050' Unit #1	19. PROPOSED DEPTH 5905'	20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): GR 6505'

22. APPROX. DATE WORK WILL START*: After Unit #31-S

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8" new	36#, K-55	300'	180 sx, 3% CaCl
8-3/4"	7" new	23#, K-55	5905'	To be determined

We would like to drill the subject well to an estimated depth of 5905', anticipated formation tops are as follows: Mancos at the surface, Frontier at 5350', Mowry at 5572', Dakota at 5705', and Morrison at 5840'.

Mud will be adequate to contain formation fluids and in sufficient quantities to efficiently drill the well; blowout preventers will be checked daily and pressure tested after each string of casing is set; no cores, no DST's; no mud logging unit: 20 days drilling time; no abnormal temperatures, pressures, or H2S anticipated; probably run Laterlog & CDL logs.

APPROVED BY THE DIVISION OF
OIL, GAS, AND MINING
DATE: 2-18-77
BY: C. B. Feight

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED J. D. Hyde TITLE Manager, Drilling and Petroleum Engineering DATE Feb. 12, 1977

(This space for Federal or State office use)

PERMIT NO. 43-009-30023 APPROVAL DATE

APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

Well Name Clay Basin Unit Well No. 32-S Location NW SW 22-3N-24E

Daggett County, Utah

Wellhead Equipment	Size	Pressure Rating	Pressure Test
Surface Casing Flange	10	3000	
Casing Spool			
Tubing Spool	10 x 6	3,000	6,000
Tubing Bonnet	10 x 4	3,000	6,000

Blow Out Preventers (Top to Bottom)	Size	PSI Rating	PSI Test	Bag	Rams
	10	3,000	6,000		Blind
	10	3,000	6,000		4-1/2

Gas Buster: ___ Yes X No Degasser: ___ Yes X No

Kill or Control Manifold

2" Size | 3,000 Pressure Rating | 6,000 Pressure Rating Test | No Hydraulic Valves

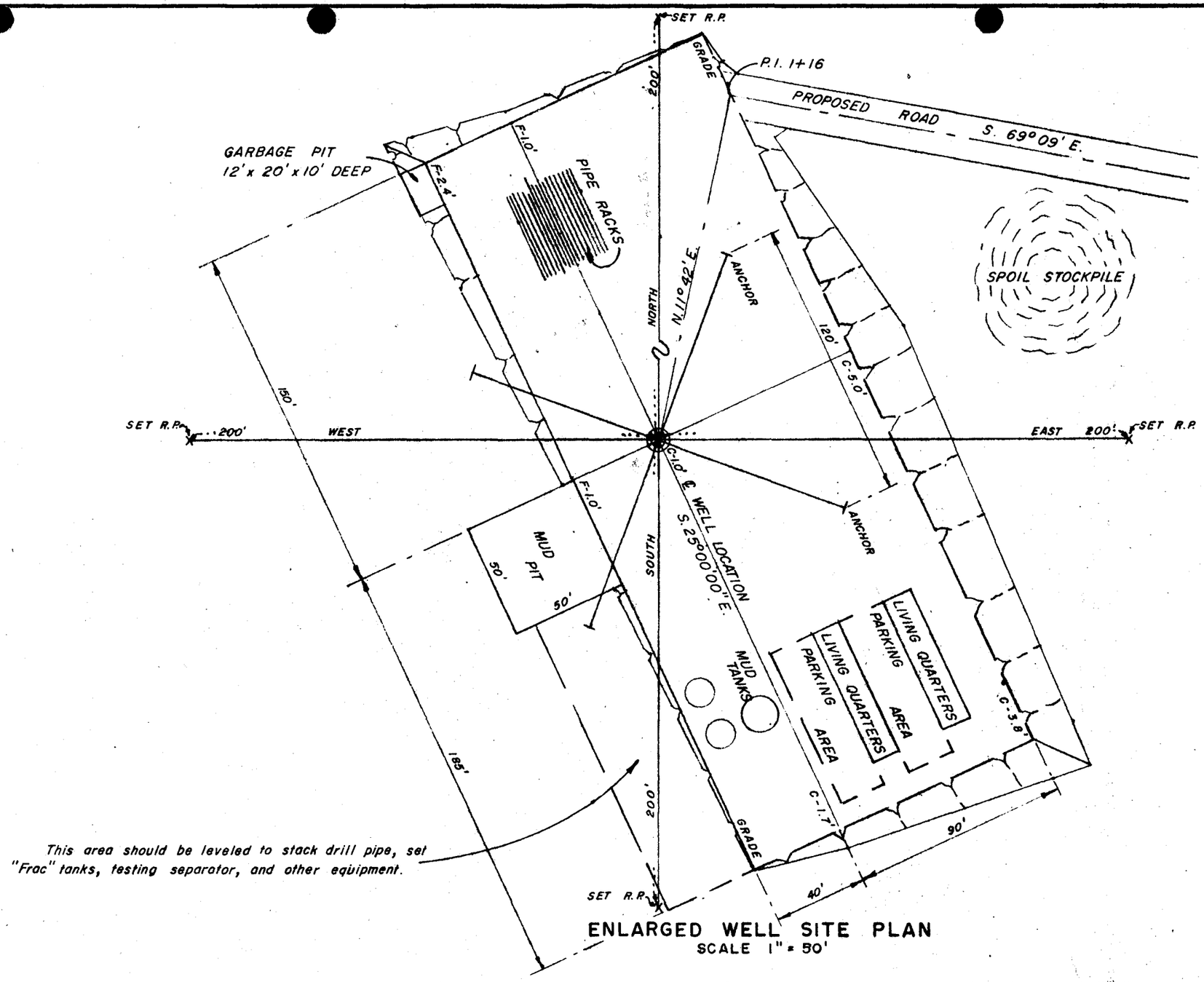
Auxiliary Equipment: Kelly Cock — X Yes ___ No

Monitoring Equipment on Mud System — ___ Yes X No

Full Opening Drill Pipe Stabbing Valve on Floor — X Yes ___ No

Type of Drilling Fluid: X Water Base Mud | ___ Air | ___ Gas | ___ Oil Base Mud

Anticipated Bottom Hole Pressure 500 PSI



This area should be leveled to stack drill pipe, set "Frac" tanks, testing separator, and other equipment.

U.S.L.

ENLARGED WELL SITE PLAN
SCALE 1" = 50'

DRILLING W.O.

GENERAL NOTES:

At sites where topsoil is present, same is to be removed and stored on the adjacent land for restoration of the site when required.

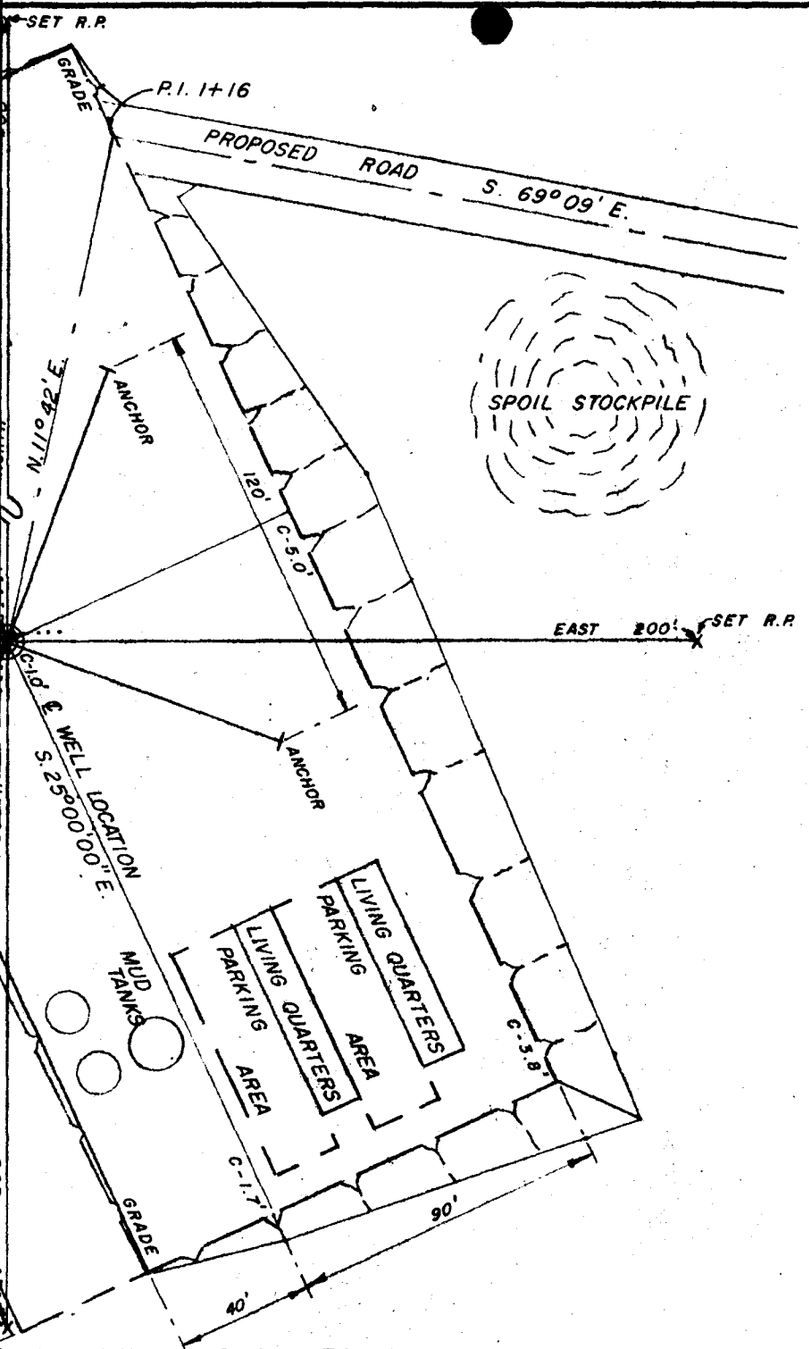
Mud pit and garbage pit are to be fenced, unlined.

For well location profiles see drawing number M-12402

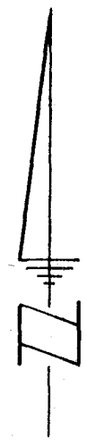
Area for well location 1.0 acres.

LEGEND	
⊕	℄ WELL
⊕	STONE CORNER
⊕	PIPE CORNER

ENGINEERING RECORD	
SURVEYED BY	J.D. Gotfredson 2/1/77
REFERENCES	G.L.O. PLAT ☒ U.S.G.S. QUAD. MAP ☐
LOCATION DATA	
FIELD	Clay Basin
LOCATION: NW 1/4, SW 1/4, Section 22, T.3N., R.24E., Salt Lake Meridian, 500' FWL, 2150' FSL.	
Daggett County, Utah	
WELL ELEVATION: 6505 "As Graded" by electronic vertical angle elevations from M.F.S.Co. bench mark △ 122	

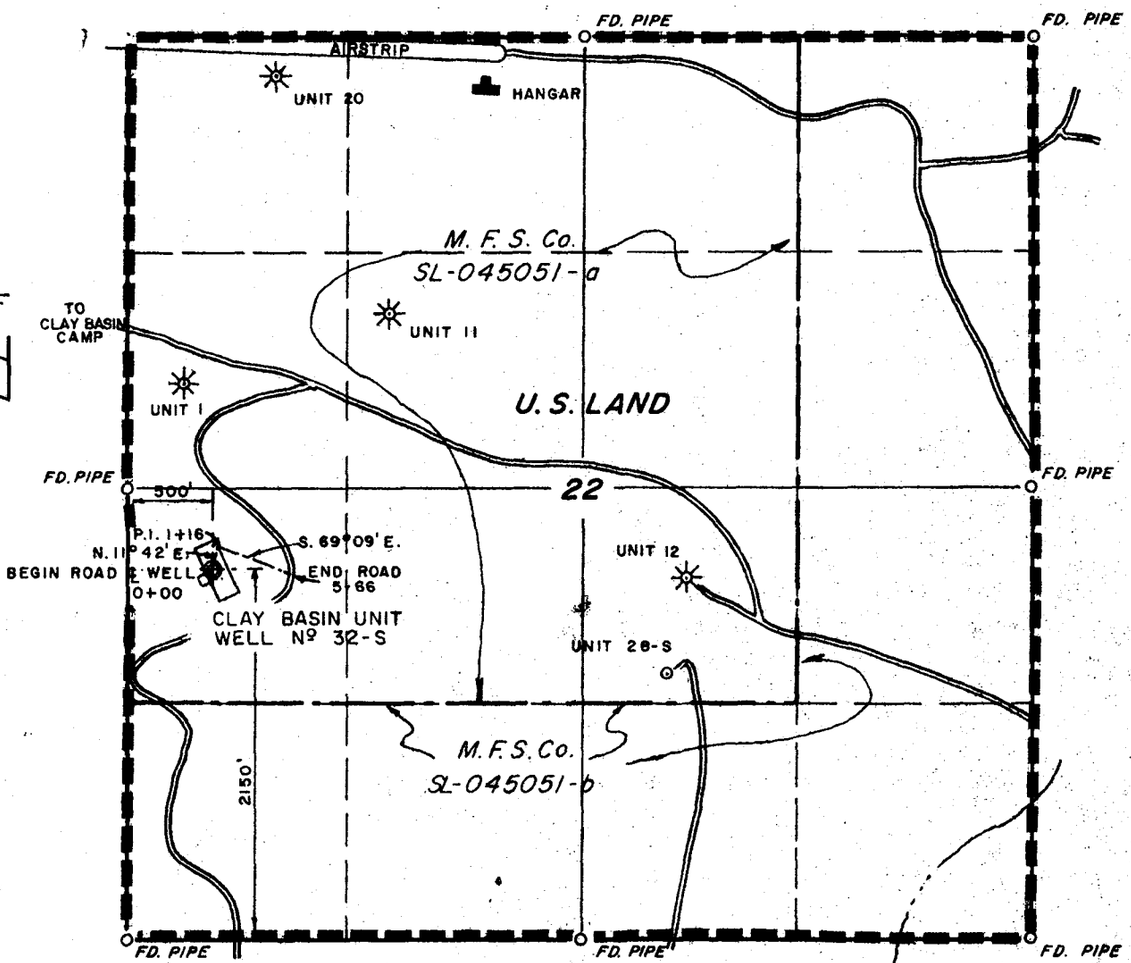


RGED WELL SITE PLAN
SCALE 1" = 50'



U.S. LAND

T. 3 N., R. 24 E.



LOCATION PLAN
SCALE 1" = 1000'

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge.

ENGINEER
UTAH REGISTRATION L.S. Nº 3521

DRILLING W.O.

LEGEND
⊕ ℄ WELL
⊕ STONE CORNER
⊕ PIPE CORNER

ENGINEERING RECORD	
SURVEYED BY	J.D. Gotfredson 2/1/77
REFERENCES	G.L.O. PLAT ☒ U.S.G.S. QUAD. MAP ☐
LOCATION DATA	
FIELD	Clay Basin
LOCATION: NW 1/4, SW 1/4, Section 22, T.3N., R.24E., Salt Lake Meridian, 500'FWL, 2150'FSL.	
Daggett County, Utah	
WELL ELEVATION: 6505 "As Graded" by electronic vertical angle elevations from M.F.S.Co. bench mark △ 122	

REVISIONS			
NO.	DESCRIPTION	DATE	BY

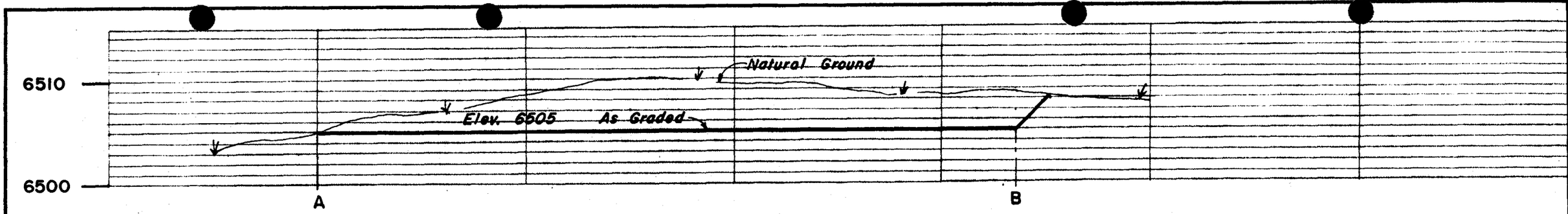
MOUNTAIN FUEL RESOURCES, INC.

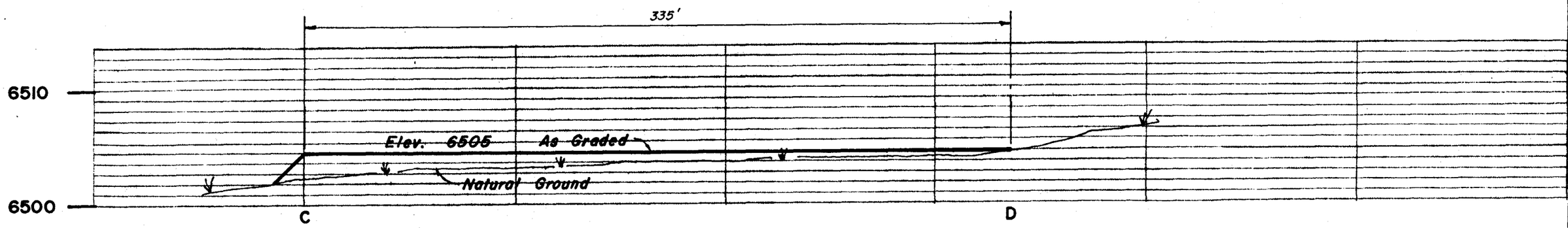
CERTIFIED WELL LOCATION
AND
WELL SITE PLAN

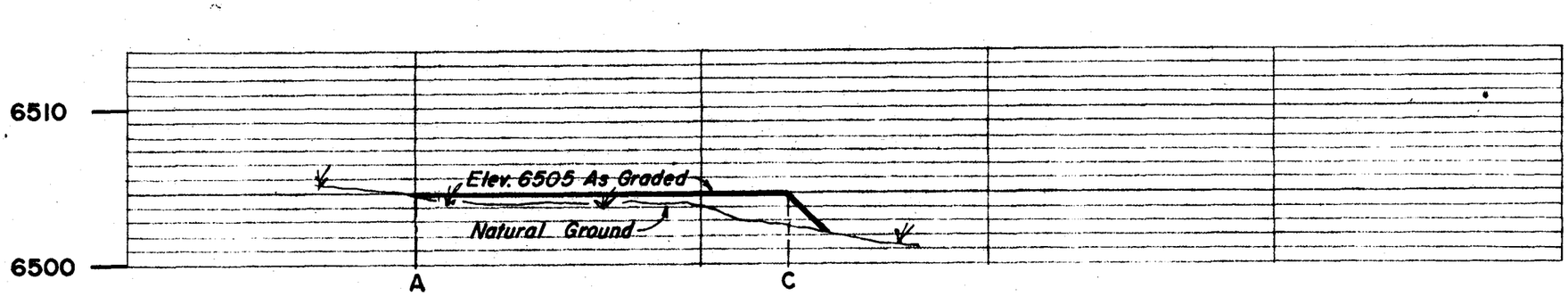
CLAY BASIN UNIT WELL Nº 32-S

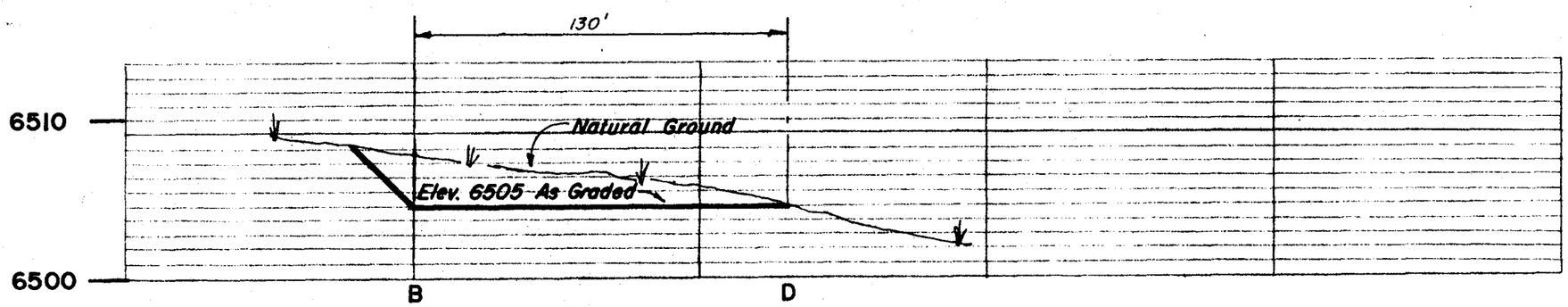
DRAWN: 2/2/77 C.R.W.	SCALE: AS NOTED
CHECKED: GeL | SMF	DRWG. NO. M-12401 1/2
APPROVED: RWH	

FILE NO. A-11 SHEET 1 OF 2



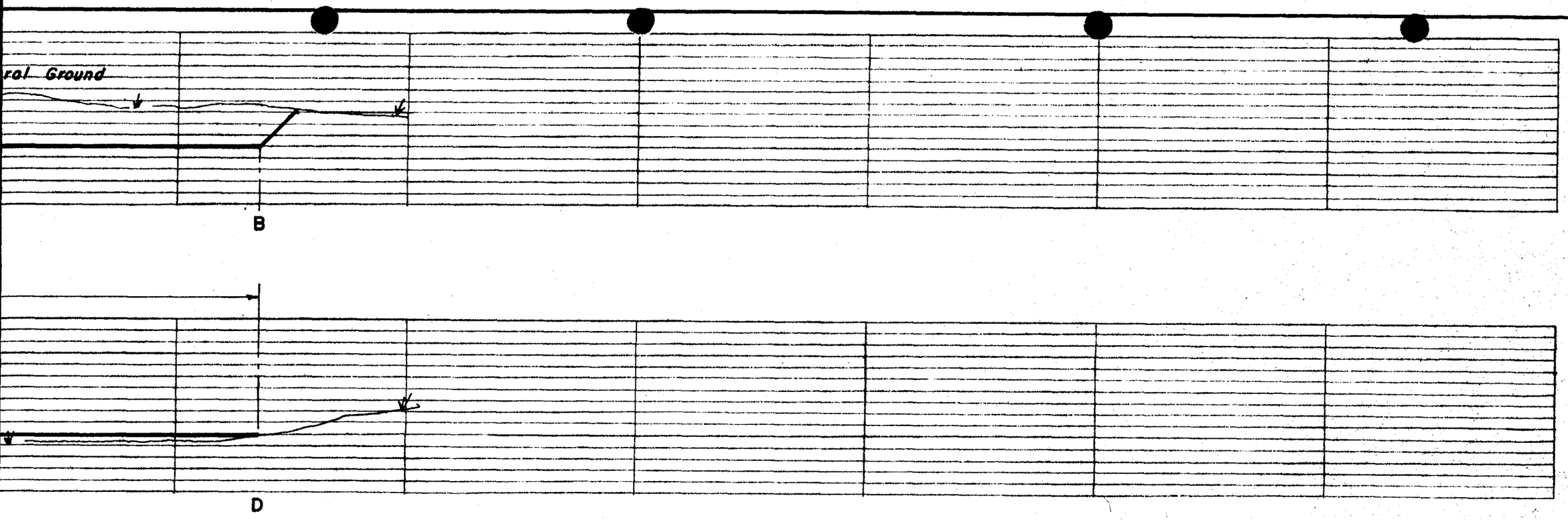


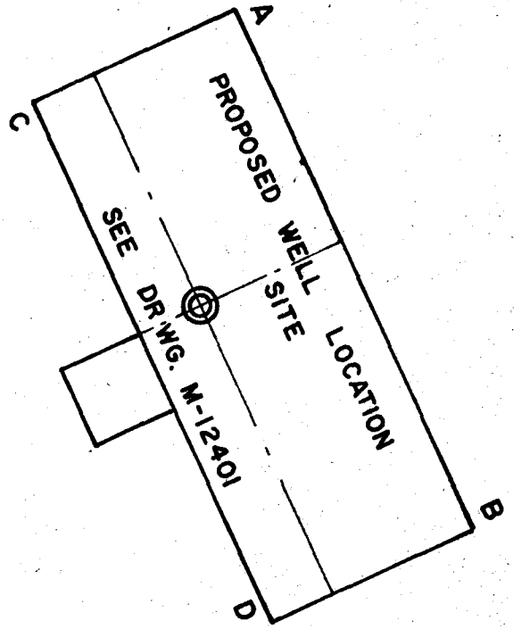




PROFILE SECTIONS — PROPOSED GRADED LOCATION

Scale
HORIZ. 1"= 50'
VERT. 1"= 10'





KEY MAP
Scale 1"=100'

GRADED LOCATION

REVISIONS			
NO.	DESCRIPTION	DATE	BY

MOUNTAIN FUEL RESOURCES, INC.

PROFILES
FOR
CLAY BASIN UNIT WELL Nº 32-S
WELL LOCATION SITE

DRAWN: 2-3-77 C.R.W.	SCALE: AS NOTED
CHECKED: GeL SMF	DRWG. NO. M-12402 2/2
APPROVED: RWH	

CHECKLIST 3000psi EQUIPMENT

Well _____ Casing _____

Contractor and operator to furnish items checked (x)

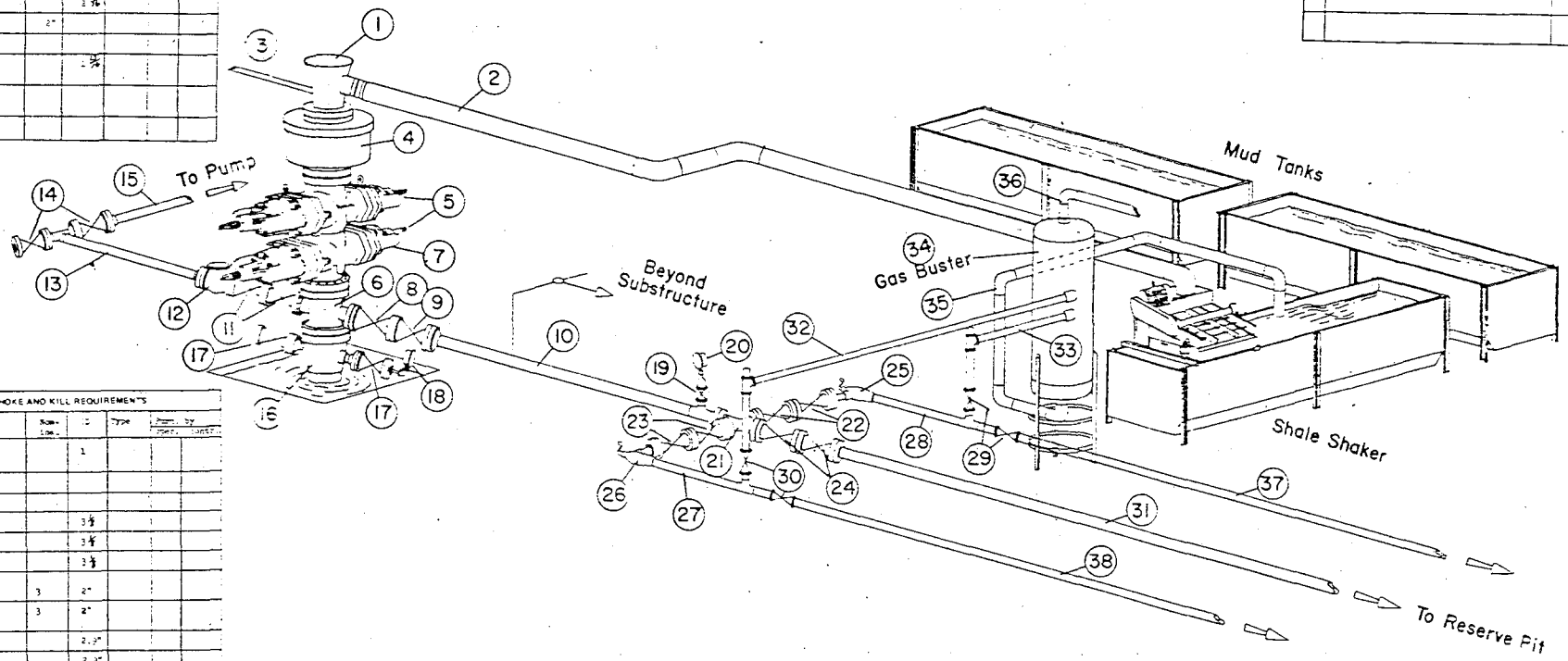
	STANDARD STACK REQUIREMENTS					
No.	Item	Nominal	ID	Type	Furn. by Oper.	Contr.
1	Drilling Nipple					
2	Flowline					
3	Fill up line	2"				
4	Annular Preventor			Hydril Cameron Shaffer		
5	Two single or one dual Hyd. oper. ram			U. S.? F. L.?		
6	Drilling Spool with 2" and 3" outlets			Forest		
7	As alternate to (5) Run and fill lines from outlets in this ram.					
8	Valve Gate		3 1/8			
9	Valve-Hydraulically operated Gate		3 1/8			
10	Choke Line		3.1			
11	Gate Valves		2 1/16			
12	Check Valve		2 1/16			
13	Kill Line	2"				
14	Valves-Gate		2 1/16			
15	Kill Line to Pumps	2"				
16	Casing Head					
17	Valves Gate___ Plug___		1 13/16			
18	Compound Pressure Gauge					
	Wear Bushing					

SPECIAL CHOKE AND KILL REQUIREMENTS		

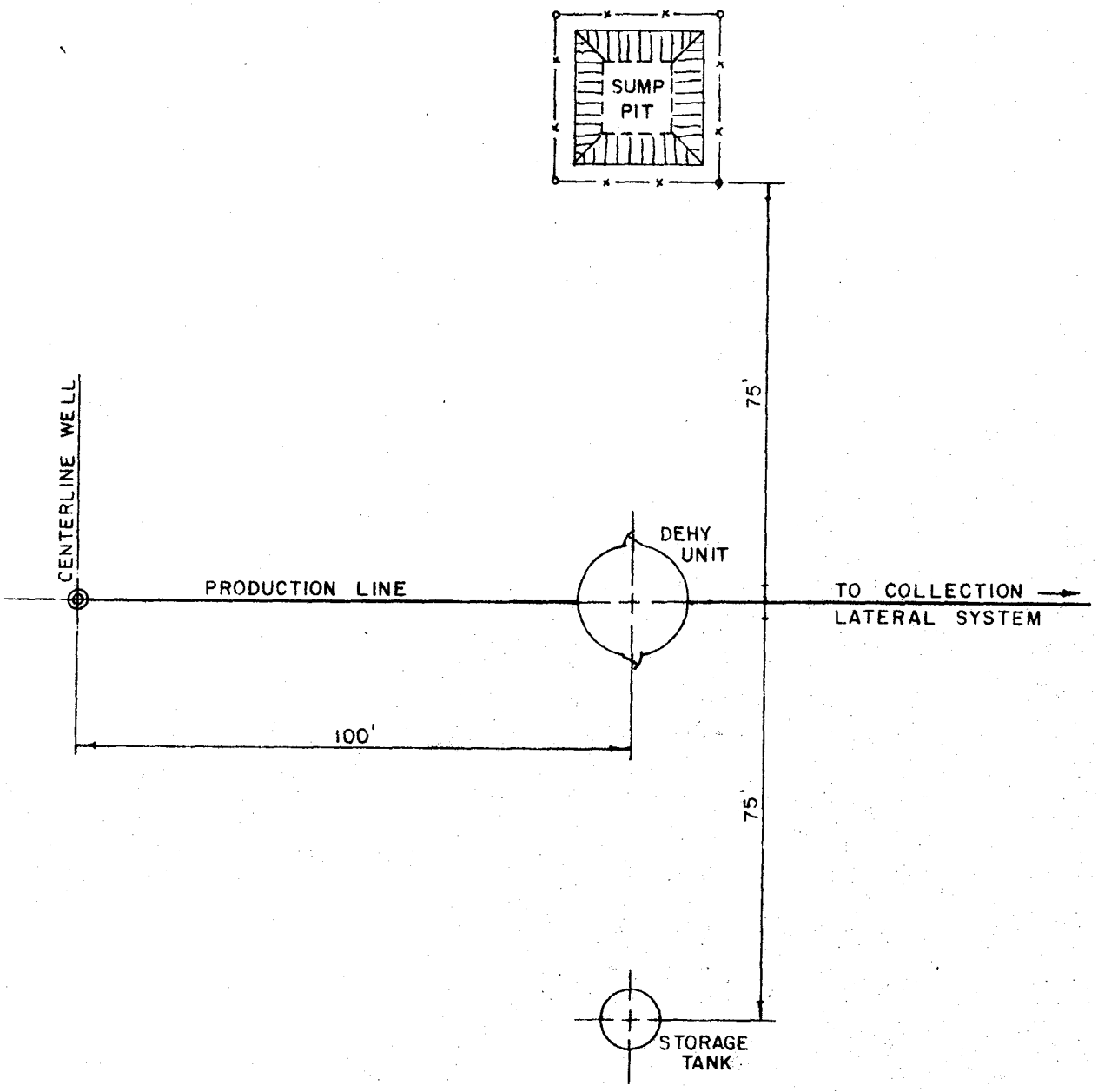
SPECIAL STACK REQUIREMENTS		

MOUNTAIN FUEL SUPPLY COMPANY

3000 psi BLOWOUT PREVENTION EQUIPMENT



STANDARD CHOKE AND KILL REQUIREMENTS						
No.	Item	Nominal	ID	Type	Furn. by Oper.	Contr.
19	Valve Gate___ Plug___		1			
20	Compound Pressure					
21	Cross 3"X3"					
22	Valve Gate		3 1/8			
23	Valve Gate		3 1/8			
24	Valve Gate		3 1/8			
25	Choke Gas Hyd or equivalent	3	2"			
26	Choke Gas Hyd or equivalent	3	2"			
27	Line to Seperator		2.9"			
28	Line to seperator		2.9"			
29	Valve Gate		3 1/8			
30	Valves Gate		3 1/8			
31	Line to Res. Pit		2.9"			
32	Line to Seperator	4"	2.9"			
33	Line to Seperator	4"	2.9"			
34	Seperator					
35	Discharge Line					
36	Vent Line					
37	Line to Res.		2.9"			
38	Line to Res. Pit		2.9"			



REVISIONS			
NO.	DESCRIPTION	DATE	BY

MOUNTAIN FUEL RESOURCES, INC.

TYPICAL PRODUCTION FACILITIES LAYOUT

FOR

CLAY BASIN UNIT WELL Nº 32-S

DRAWN: 7/9/76 FJC	SCALE: NONE
CHECKED:	DRWG. NO. M-12205
APPROVED:	

FILE NO. A-8 SHEET OF

DEVELOPMENT PLAN FOR U.S.G.S. APPROVAL OF SURFACE USE
MOUNTAIN FUEL SUPPLY COMPANY DRILLING WELLS

Well Name - Clay Basin Well No. 32-S

Field or Area - Clay Basin, Daggett County, Utah

1. Existing Roads -

A) Proposed well site as staked - Refer to well location plat No. M-12401 for location of well access road and directional reference stakes.

B) Route and distance from nearest town or locatable reference point to where well access route leaves main road - Refer to lateral map No. M-9030. From the Wyoming-Utah State Line to Rock Springs, Wyoming is 50 miles.

C) Access road to location - Refer to lateral map No. M-9030 and well site map No. M-12401 for access road from Wyoming-Utah State Line to Clay Basin Unit Well No. 32-S.

D) If exploratory well, all existing roads within a 3-mile radius of well site - Not an exploratory well

E) If development well, all existing roads within a 1-mile radius - This will be a storage development well. Refer to later map No. M-9030 for existing roads.

F) Plans for improvement and/or maintenance of existing roads - All existing roads will be maintained as needed by Mountain Fuel equipment.

2. Planned Access Road -

A) Width - 16' wide from shoulder to shoulder.

B) Maximum grade - The maximum grade on the road is 8 percent.

C) Turnouts - No turnouts will be constructed.

D) Drainage design - A drainage ditch on the uphill side of the road will be constructed. It will be a minimum of one foot below the surface of the road. No water diversion ditches are anticipated.

E) Location and size of culverts and description of major cuts and fills -

1) For culvert size and location see drawing No. M-12401.

2) No sidehill cuts.

F) Surfacing material - No surfacing material will be needed either on the road of location.

G) Necessary gates, cattle guards or fence cuts - No cattle guards, gates, or fence cuts are anticipated.

H) New or reconstructed roads - Refer to drawing No. M-12401 for new access road. No existing road to be reconstructed.

3. Location of Existing Wells -

A) Water wells - None within a one mile radius.

B) Abandoned wells - None within a one mile radius.

C) Temporarily abandoned wells - None within a one mile radius.

D) Disposal wells - None within a one mile radius.

E) Drilling wells - Refer to area map No. M-9030 for proposed wells.

F) Producing wells - Clay Basin Well Nos. 1, 7, 9, 12, and 20 are productive gas wells.

G) Shut-in wells - None within a one mile radius.

H) Injection wells - Clay Basin Well Nos. 2, 4, 11, and 24 are gas storage injection/withdrawal lines.

I) Monitoring or observation wells for other resources - None within a one mile radius.

4. Location of Existing And/Or Proposed Facilities - Refer to area map No. M-9030.

A) 1) Tank batteries - None within a one mile radius.

2) Production facilities - Each productive gas well has its own production facilities. Also, a compressor plant is located near Unit Well No. 3. Also, a compressor plant for injection is being built near Unit Well No. 3.

3) Oil gathering lines -
No oil gathering lines are located in the Clay Basin area.

4) Gas gathering lines - Several gas gathering lines are located within a one mile radius. Refer to area map No. M-9030.

5) Injection lines - Several injection/withdrawal lines are located within a one mile radius. Refer to area map No. M-9030.

6) Disposal lines -
None within a one mile radius.

B) 1) Proposed location and attendent lines by flagging if off the well pad - The well will be used as a gas storage well. A 6-inch buried line will be installed from the well to the central dehydration facilities as shown on drawing No. M-9030.

2) Dimensions of facilities - Refer to drawing No. M-12205.

3) Construction methods and materials - No construction materials are anticipated. The dirt work will be done with a back hoe, i.e., ditches, dehydration base, tank base, etc.

4) Protective measures and devices to protect livestock and wildlife - The sump pit will be fenced as shown on drawing No. M-12205.

C) Plans for rehabilitation of disturbed area no longer needed for operations after construction is completed - After construction is complete, areas of non-use will be restored and seeded.

5. Location and Type of Water Supply -

A) Location of water - The water withdrawal point on Red Creek is located in the SW 1/4 of Section 22, T.12N., R.105W., of the 6th P.M., Sweetwater County, Wyoming.

B) Method of transporting water - Water will be hauled by tank truck from Red Creek to Unit Well No. 32-S. The well access road, as shown on drawing No. M-9030, will be used as the water haul road.

C) Water well to be drilled on lease - No water well will be drilled.

6. Source of Construction Material -
A) Information - No construction material will be used.

B) Identify if from Federal or Indian land -

C) Where materials are to be obtained and used -

D) Access roads crossing Federal or Indian lands -

7. Method for Handling Waste Disposal -
A-D) Cuttings, drilling fluids, produced fluids, and sewage will be placed in the mud pit.

E) Garbage and other waste material will be placed in the burn pit.

F) After drilling operations have been completed, the location will be cleared of all litter, and the trash will be burned in the burn pit. The burn pit will be covered over. The mud pit liquids will be pumped out and dumped on the existing roads. The mud pit will be covered over.

8. Ancillary Facilities - There now is a camp located in the NE 1/4 of Section 21, T.3N., R.24E. with housing and general camp facilities. A landing strip is located on the north line of Section 21. Water is piped to the camp from a spring to the west.

9. Well Site Layout -
See drawing Nos. M-12401 and M-12402.

10. Plans for Restoration of Surface -
A) After drilling operations, the well site will be cleared and cleaned and the burn pit filled in. Should the well be a dry hole, the surface will be restored to the extent that it will blend in with the landscape. The reserve pit liquids will be pumped out and dumped on the existing roads.

B) Revegetation and rehabilitation of the location and access road will be done to comply with Bureau of Land Management recommendations.

C) Prior to rig release, pits will be fenced and so maintained until clean up.

D) If oil is in the mud pit, overhead flagging will be installed to keep birds out.

E) Clean up will begin within two months after drilling operations have been completed and the land will be restored at this time.

11. Other Information -
A) The location lies on a westerly sloping hill. The slope is down to the west at ±3%. The soil is sand and gravel rock. The vegetation is sagebrush and native grass.

B) The surface belongs to the U.S. Government.

C) Water can be located in Red Creek. The Clay Basin camp is occupied by Mountain Fuel personnel. No historical, archaeological, or cultural sites are in the area to my knowledge.

12. Lessee's or Operator's Representative -
D. E. Dallas, Drilling Superintendent, P. O. Box 1129, Rock Springs, Wyoming 82901, telephone 307-362-5611.

13. Certification -

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Mountain Fuel Supply Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

Date _____

Name Ogle Dallas Lee
Title Drilling Superintendent

cdk

STATE OF UTAH
DIVISION OF OIL, GAS, & MINING

** FILE NOTATIONS **

Date: Feb. 16-

Operator: Mountain Fuel Resources

Well No. Clay Basin Unit 32-5

Location: Sec. 32 T. 3N R. 24E, County: Daggett

File Prepared	✓	Entered on N.I.D.	✓
Card Indexed	✓	Completion Sheet	✓

Checked By:

Administrative Assistant: JW

Remarks:

Petroleum Engineer: [signature]

Remarks:

Director: [signature]

Remarks:

Include Within Approval Letter:

Bond Required [ ] Survey Plat Required [ ]

Order No. 164-1 [✓] Surface Casing Change [ ] to

Rule C-3(c), Topographical exception/company owns or controls acreage within a 660' radius of proposed site [ ]

O.K. Rule C-3 [ ] O.K. In Clay Basin Unit [✓]

Other

[ ] Letter Written/Approved

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER Gas Storage

2. NAME OF OPERATOR
Mountain Fuel Resources, Inc.

3. ADDRESS OF OPERATOR
P. O. Box 1129, Rock Springs, Wyoming 82901

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
2193' FSL, 478' FWL NW SW

5. LEASE DESIGNATION AND SERIAL NO.
SL - 045051 a

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
-

7. UNIT AGREEMENT NAME
Clay Basin Gas Storage Agreement

8. FARM OR LEASE NAME
Unit Well

9. WELL NO.
32-S

10. FIELD AND POOL, OR WILDCAT
Clay Basin Gas Storage

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
NW SW 22-3N-24E

14. PERMIT NO.
API No.: 43-009-30023

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
GR 6503.6'

12. COUNTY OR PARISH
Daggett

13. STATE
Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Move location			X
(Other)			☐	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Location was moved per request of BLM, new location plats are attached.

RECEIVED
MAR 10 1977
DIVISION OF OIL, GAS & MINING

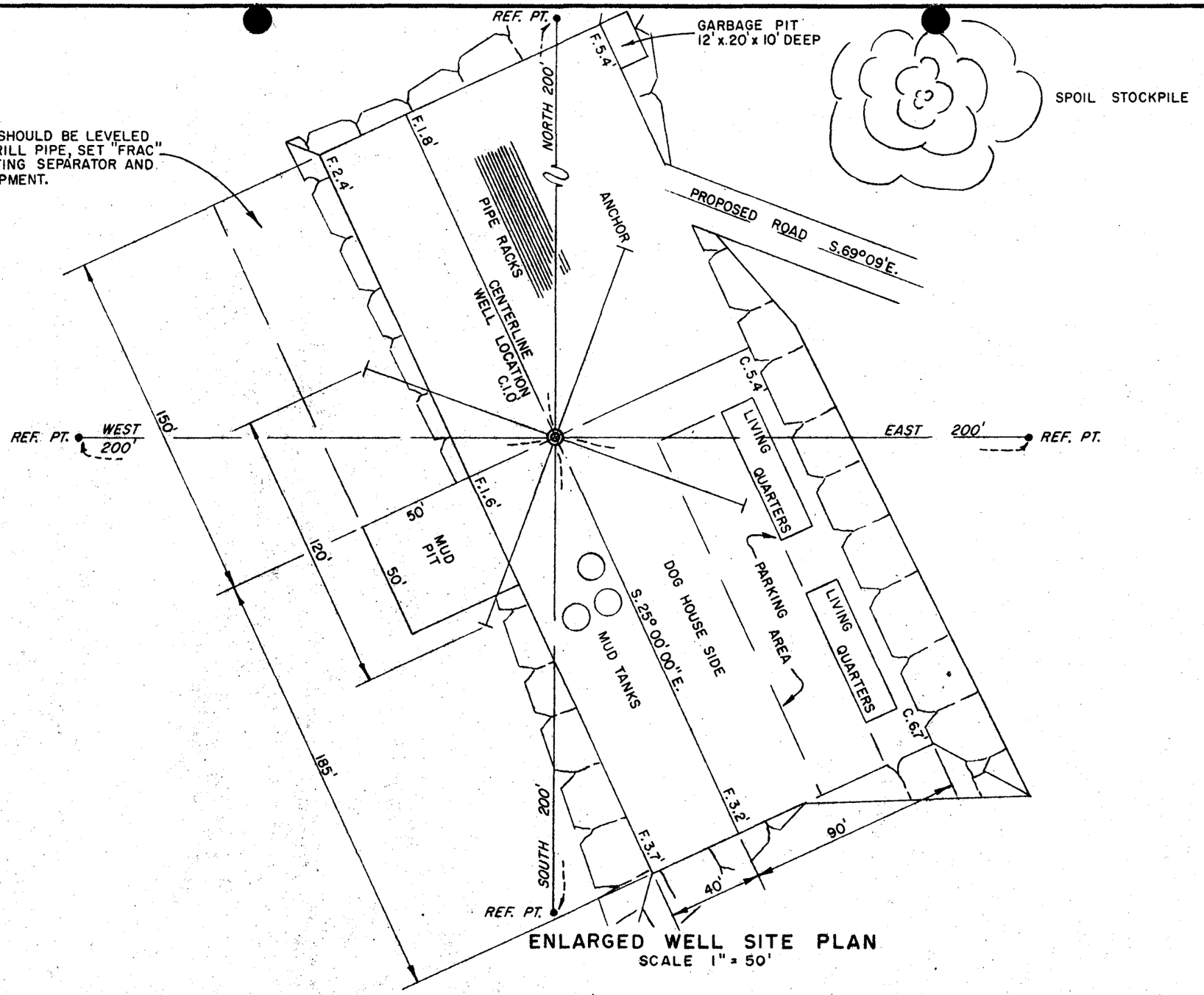
18. I hereby certify that the foregoing is true and correct

SIGNED C. B. Myers TITLE Manager, Drilling and Petroleum Engineering DATE March 8, 1977

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side



ENLARGED WELL SITE PLAN
SCALE 1" = 50'

DRILLING W.O.

GENERAL NOTES:

At sites where topsoil is present, same is to be removed and stored on the adjacent land for restoration of the site when required.

Mud pit and garbage pit are to be fenced, unlined.

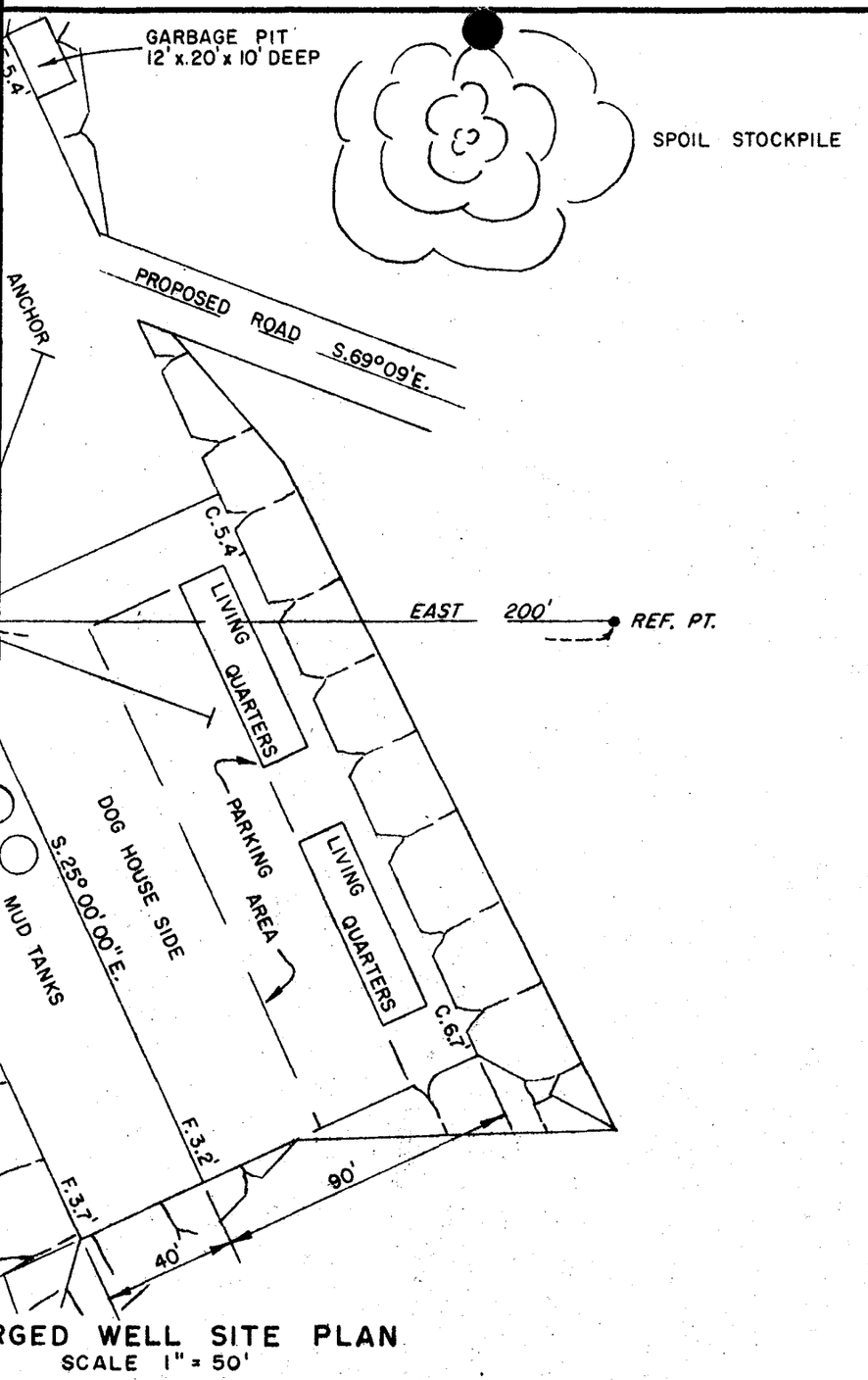
For well location profiles see Drwg. Nº M-12447

Area for well location = 1.0 Acres

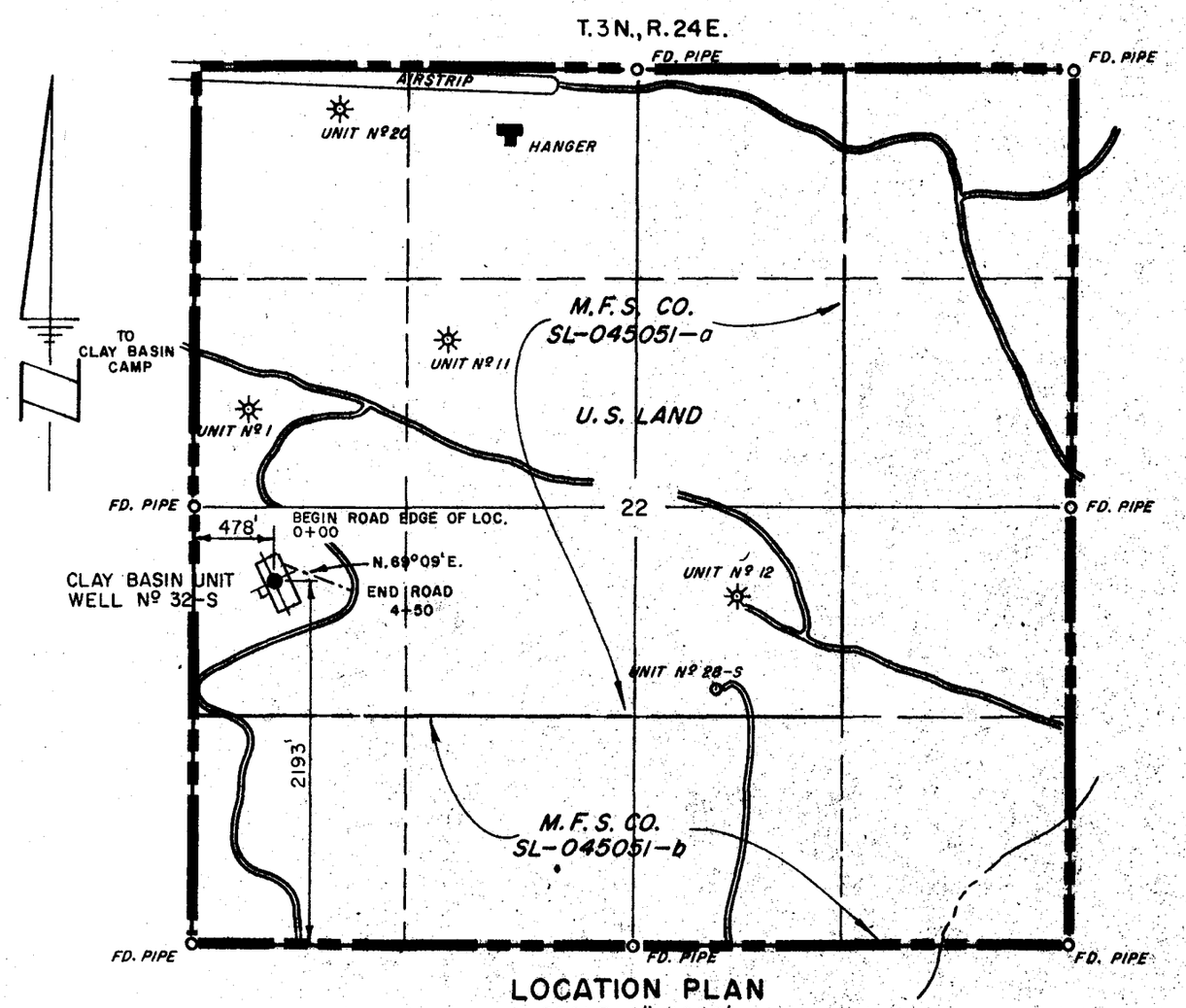
NOTE: For original location see Drwg. Nº M-12401

LEGEND
⊕ ℄ WELL
⊕ STONE CORNER
⊕ PIPE CORNER

ENGINEERING RECORD	
SURVEYED BY	FRED HANKING 2-21-77
REFERENCES	G.L.O. PLAT ☒ U.S.G.S. QUAD. MAP ☐
LOCATION DATA	
FIELD	CLAY BASIN
LOCATION: NW 1/4, SW 1/4, SEC. 22, T. 3 N., R. 24 E. SALT LAKE MERIDIAN, 478' FWL, 2193' FSL	
DAGGETT COUNTY, UTAH	
WELL ELEVATION: 6503.6 (AS GRADED) BY ELECTRONIC VERTICAL ANGLE ELEVATIONS FROM M.F.S. Co. BENCH MARK Δ 122.	



RGED WELL SITE PLAN
SCALE 1" = 50'



LOCATION PLAN
SCALE 1" = 1000'

U.S. LAND

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge.

ENGINEER
UTAH REGISTRATION L.S. Nº 3521

DRILLING W.O.

LEGEND
⊕ ℄ WELL
STONE CORNER
⊕ PIPE CORNER

ENGINEERING RECORD	
SURVEYED BY	FRED HANKING 2-21-77
REFERENCES	G.L.O. PLAT ☒ U.S.G.S. QUAD. MAP ☐
LOCATION DATA	
FIELD	CLAY BASIN
LOCATION: NW 1/4, SW 1/4, SEC. 22, T. 3 N., R. 24 E. SALT LAKE MERIDIAN, 478' FWL, 2193' FSL	
DAGGETT COUNTY, UTAH	
WELL ELEVATION: 6503.6 (AS GRADED) BY ELECTRONIC VERTICAL ANGLE ELEVATIONS FROM M.F.S. Co. BENCH MARK Δ 122.	

REVISIONS			
NO.	DESCRIPTION	DATE	BY

MOUNTAIN FUEL RESOURCES, INC.

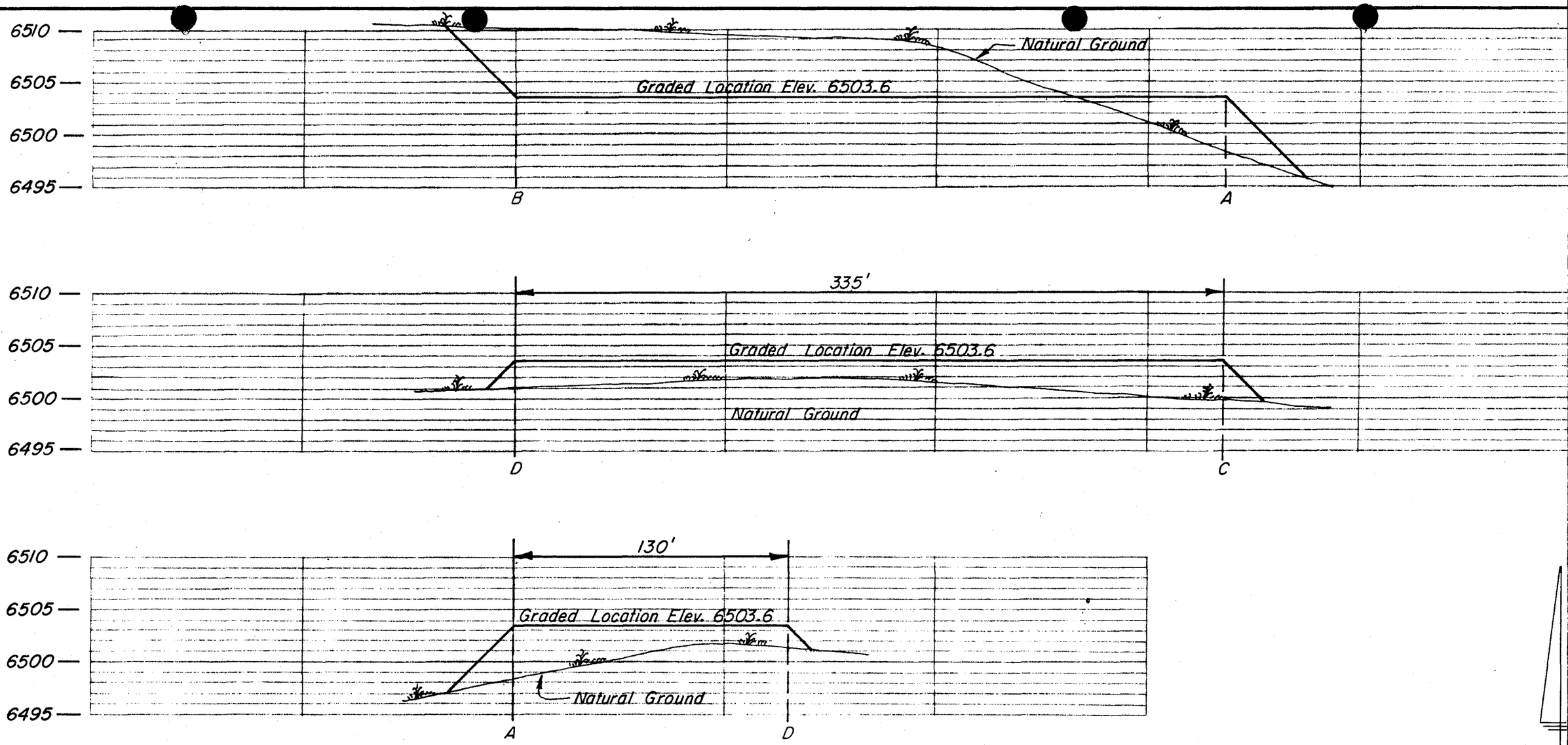
CERTIFIED WELL LOCATION
AND
WELL SITE PLAN

CLAY BASIN UNIT WELL Nº 32-S

DRAWN: 2-23-77 GeB	SCALE: AS NOTED
CHECKED: GeL	DRWG. NO. M-12446
APPROVED: RWH	1/2

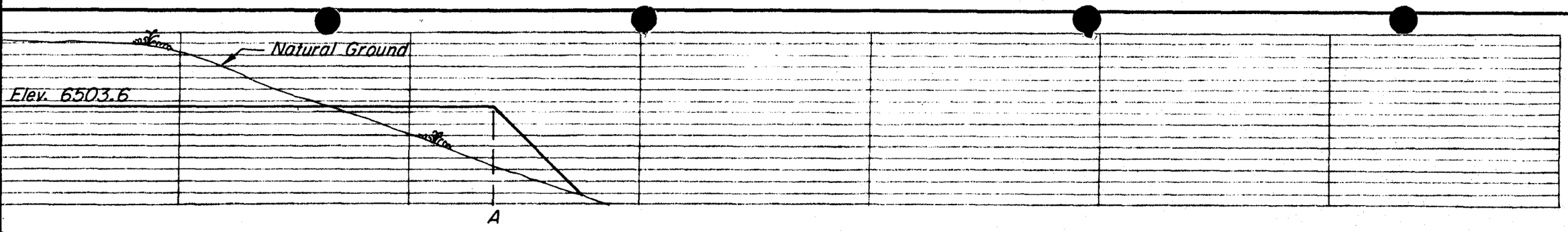
FILE NO. A-11

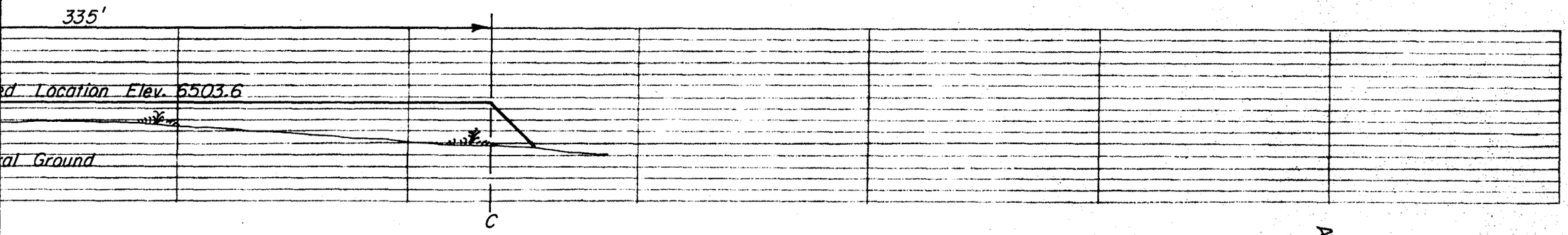
SHEET 1 OF 2

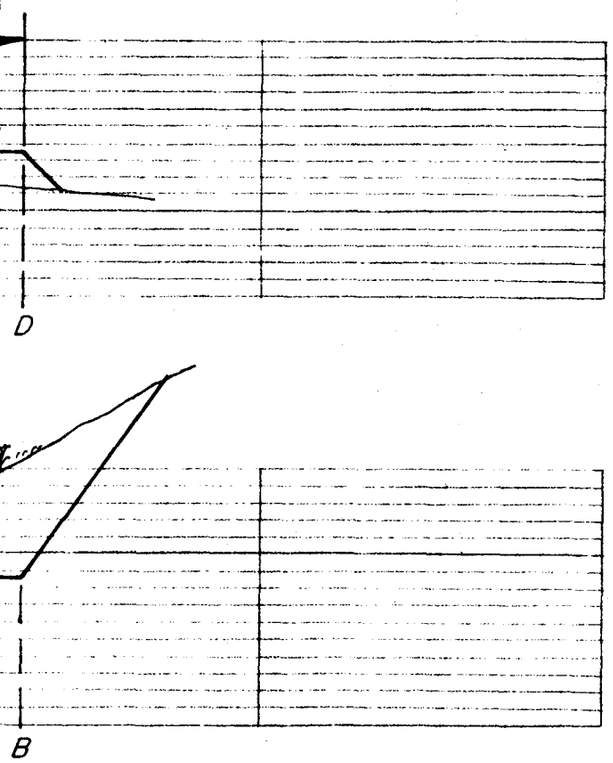


PROFILE SECTIONS
PROPOSED GRADED LOCATION

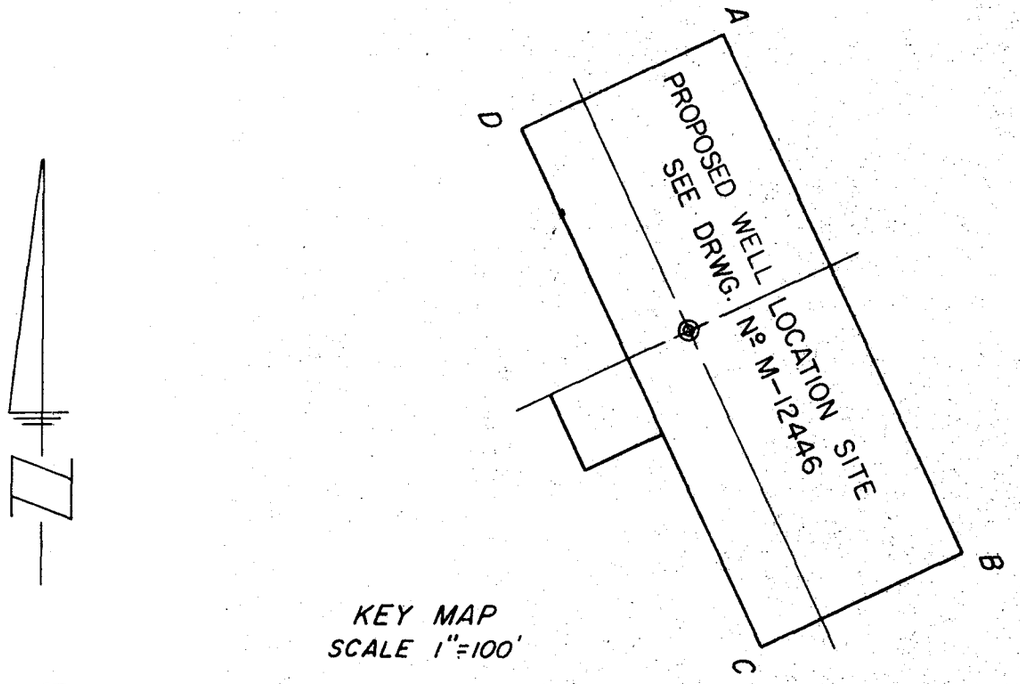
HORIZ. 1" = 50'
VERT. 1" = 10'







NS —
CATION



KEY MAP
SCALE 1"=100'

REVISIONS			
NO.	DESCRIPTION	DATE	BY

MOUNTAIN FUEL
RESOURCES, INC.

PROFILES
FOR
CLAY BASIN UNIT WELL Nº 32-S
WELL LOCATION SITE

DRAWN: 2-24-77 GeB | SCALE: AS NOTED
CHECKED: GeL
APPROVED: RWH
DRWG. NO. M-12447 | 2/2

FILE NO. A-11 SHEET 2 OF 2

INTEROFFICE COMMUNICATION

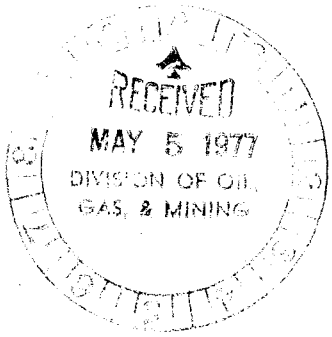
FROM T. M. Colson — Rock Springs, Wyoming (CITY / STATE)

TO R. G. Myers — DATE April 26, 1977

SUBJECT Tentative Plan to Drill
Unit Well No. 32-S
Clay Basin Field

Attached for your information and files is a tentative plan to drill the above-captioned well. This plan was written in accordance with the Geologic Prognosis dated February 11, 1977.

TMC/gm
Attachment
cc: R. D. Cash
E. R. Keller (3)
G. A. Peppinger (3)
A. J. Marushack
A. K. Zuehlsdorff
D. E. Dallas
A. J. Maser (3)
J. E. Adney
E. J. Widic
B. M. Steigleder
E. A. Farmer
D. L. Reese
U.S.G.S.
State
Paul Zubatch
P. E. Files (4)



From: Pat Brotherton

Rock Springs, Wyoming

To: T. M. Colson

April 26, 1977

Tentative Plan to Drill
Unit Well No. 32-S
Clay Basin Field

This well will be drilled to total depth by _____ Drilling Company. One work order has been originated for the drilling and completion of this well, namely 20032, Drill Unit Well No. 32-S, Clay Basin field, located in the NW SW Sec. 22, T. 3 N., R. 24 E., Daggett County, Utah. An 8-3/4-inch hole will be drilled to a total depth of 5905 feet and 7-inch O.D. casing run. It is planned to complete the well as a gas storage well in the Dakota formation. Surface elevation is at 6503.6 feet.

1. Drill 12-1/4-inch hole to approximately 330 feet KBM.

2. Run and cement approximately 300 feet of 9-5/8-inch O.D., 36-pound, K-55, 8 round thread, LT&C casing. The casing will be cemented by Halliburton with 165 sacks of regular Type "G" cement with 3 percent calcium chloride, which represents theoretical requirements plus 100 percent excess cement for 9-5/8-inch O.D. casing in 12-1/4-inch hole with cement returned to surface. Plan on leaving a 10 foot cement plug in the bottom of the casing after displacement is completed. Floating equipment will consist of a Baker guide shoe. The top and bottom of all casing collars will be spot welded in the field and the guide shoe will be spot welded to the shoe joint in the Rock Springs Machine Shop. The bottom of the surface casing should be landed in such a manner that the top of the 10-inch 3000 psi casing flange will be at ground level. A cellar three feet deep will be required. Prior to cementing, circulate 50 barrels of mud. Capacity of the 9-5/8-inch O.D. casing is 24 barrels.

3. After a WOC time of 6 hours, remove the landing joint and wash off casing collar. Install a NSCo. Type "B" 10-inch 3000 psi regular duty casing flange tapped for 9-5/8-inch O.D. casing. Install a 2-inch extra heavy nipple, 6-inches long, and

a Demco (2000 psi WOG, 4000 psi test) ball valve on one side outlet of the casing flange and a 2-inch extra heavy bull plug in the opposite side. Install a 10-inch 3000 psi double gate hydraulically operated blowout preventer with blind rams in the bottom and 4-1/2-inch rams in the top and finish nippling up. After a WOC time of 12 hours, pressure test surface casing, all preventer rams, and Kelly-cock to 1000 psi for 15 minutes using rig pump and drilling mud. The burst pressure rating for 9-5/8-inch O.D., 36-pound, K-55, 8 round thread, LT&C casing is 3520 psi.

4. Drill 8-3/4-inch hole to the total depth of 5905 feet or to such depth as the Geological Department may recommend. The mud will consist of 2 percent potassium chloride water to 4500 feet. Mud up with the potassium Dexdrid Drispac system at this point to allow a 10 cc. water loss at 5770 feet. The 10 cc. water loss will be mantained to total depth at 5905 feet. If lost circulation is encountered, only acid soluble lost circulation material will be used. A mud cleaner will be used from surface to total depth to remove undesirable solids from the mud system and to keep the mud weight to a minimum. A Company Geologist will be on location to check cutting samples; 10 foot samples from 5100 feet to total depth. Anticipated tops are as follows:

	Approximate Depth (Feet KBM)
Mancos	Surface
Frontier	5,350
Mowry	5,572
Dakota	5,705
Morrison	5,840
Total Depth	5,905 or 200 feet below the top of Dakota formation

Objective Reservoir: Dakota formation

Other Possible Producing Zones: Frontier formation

5. Run laterolog 7 with a split 4-decate logarithmic scale from surface casing to total depth. Run compensated density/gamma ray/caliper from total depth at 5905 feet to 3905 feet. The 2000 feet logged represents the minimum footage for the log.

6. Assuming gas storage zones of good quality are present as indicated by log analysis, go into hole with 8-3/4-inch bit and drill pipe to total depth to condition mud prior to running production casing. Pull bit laying down drill pipe and drill collars.

7. Run 7-inch O.D. casing as outlined in Item No. I, General Information, through the deepest producing zone as indicated by log analysis. A Baker 7-inch O.D., 8 round thread, Type G circulating differential fillup collar and guide shoe will be run as floating equipment. Rig up Halliburton and cement casing with 50-50 Pozmix "A" cement. Bring cement top behind the 7-inch O.D. casing, 1000 feet above the uppermost producing zone as indicated by log analysis. Circulate 300 barrels of drilling mud prior to beginning cementing operations. Capacity of the 7-inch O.D. casing is approximately 232 barrels. Cement requirements will be based on actual hole size as determined by the caliper portion of the formation density log. Rotate casing while circulating, mixing, and displacing cement. Displace cement with water. Bump plug with 2500 psi and hold for 15 minutes to pressure test casing. Minimum burst pressure of the 7-inch O.D., 23-pound, K-55 casing is 4360 psi.

8. Immediately after cementing operations are completed, land the 7-inch O.D. casing with full weight of casing on slips in the 10-inch 3000 psi casing flange and record indicator weight. Install NSCo. Type DP-7 10-inch 3000 psi by 6-inch

3000 psi tubing spool. Pressure test primary and secondary seals to 2500 psi for 5 minutes. Minimum collapse pressure for 7-inch O.D., 23-pound, K-55, 8 round thread, LT&C casing is 3280 psi. Install a steel plate on the 6-inch 3000 psi tubing spool flange.

9. Release drilling rig and move off location.
10. Move in and rig up a completion rig.
11. Install a 6-inch 5000 psi hydraulically operated double gate preventer with blind rams on bottom and 2-3/8-inch tubing rams on top.
12. After a WOC time of at least 50 hours, rig up Dresser Atlas and run bond log and perforating formation control log from plugged back depth to top of cement behind the 7-inch O.D. casing.
13. After a WOC time of at least 56 hours, pick up and run a 6-1/4-inch bit on 2-3/8-inch O.D., 4.7-pound, V-55, 8 round thread, EUE tubing to check plugged back depth. Rig up and displace drilling mud out of hole with drip oil. Pull and lay down 2-3/8-inch O.D. tubing.
14. Rig up Dresser Atlas perforating truck and perforate the Dakota storage sand with 2 HPF jumbo jet shots. The interval to be perforated will be chosen after the open hole logging has been reviewed and evaluated.
15. Rig up Dresser Atlas and run a Baker Model FB-1 packer (size 87-40) as follows:

    Baker Model FB-1 packer (4.0-inch I.D. through packer).

    6 foot Baker millout extension (4.0-inch I.D.).

    10 foot Baker seal bore protector (4.0-inch I.D.) changeover.

    6 foot 3-1/2-inch O.D., 9.2-pound, J-55, 8 round, EUE pup joint.

    Baker Model "F" non-ported seating nipple (size 2.81).

6 foot 3-1/2-inch O.D., 9.2-pound, J-55, 8 round, EUE pup joint.

Baker Model "R" non-ported no-go seating nipple (size 2.75).

Set packer so that the bottom of the assembly is 30 feet above the perforations.

Perforations will be chosen after the open-hole logging is completed.

16. Install 4-1/2-inch rams in preventer. Pick up a Baker locator seal assembly and a Baker Model "L" sliding sleeve and run tubing as follows:

    1 NSCo. DP4-H-1 tubing hanger tapped 4-1/2-inch O.D., 8 round thread, LT&C, top and bottom.

    4-1/2-inch O.D., 11.6-pound, J-55, 8 round thread, LT&C pup joints as required to space out.

    Approximately 187 joints 4-1/2-inch O.D., 11.6-pound, J-55, 8 round thread, LT&C tubing.

    Baker Model "L" 4-1/2-inch O.D. sliding sleeve (size 3.812), in open position.

    1 6 foot 4-1/2-inch O.D., 11.6-pound, J-55 pup joint.

    Baker Model "G" locator seal assembly with 10 feet of seal extensions (I.D. 3.0-inches).

    Land tubing in packer with 10,000 pounds compression. Space out and land in wellhead.

17. Install upper portion of wellhead.

18. Swab fluid out of wellbore. Run a short production test.

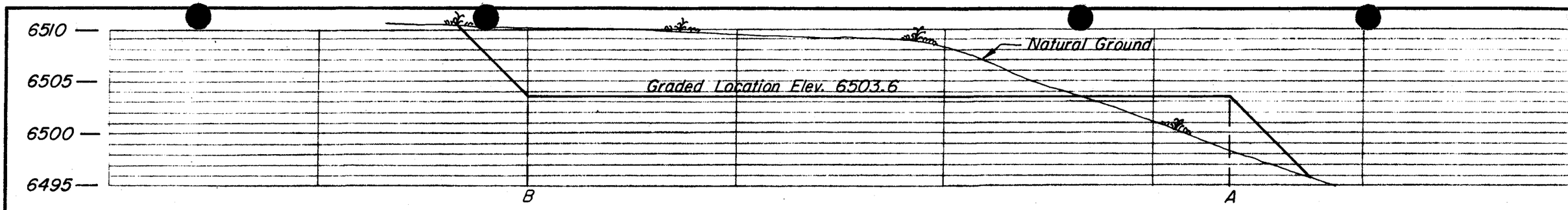
GENERAL INFORMATION

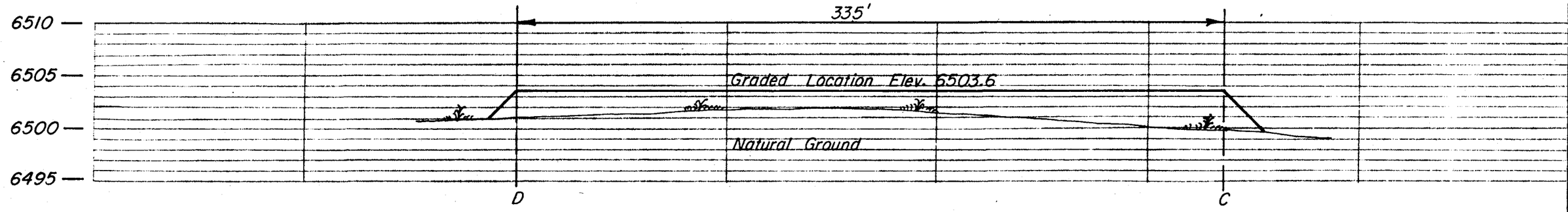
I. The following tubular goods have been assigned to the well.

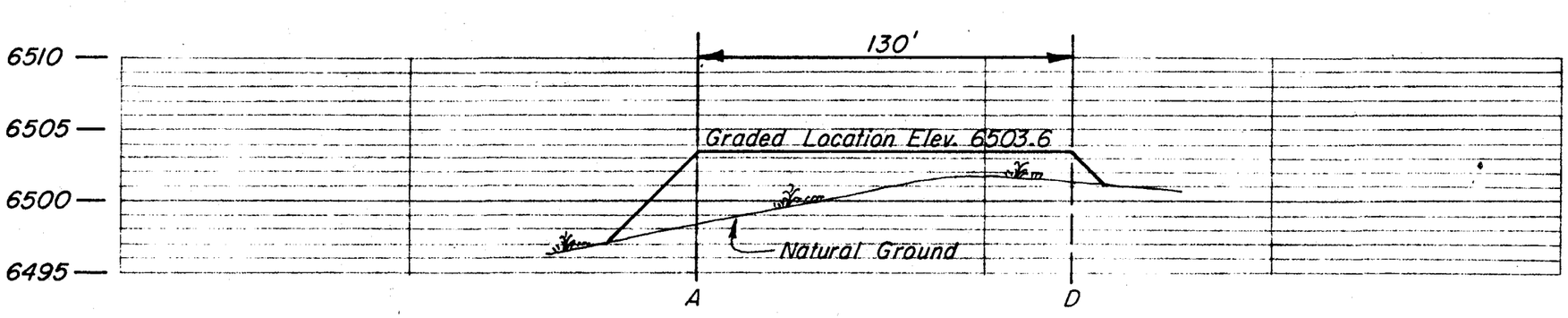
Description	Approximate Gross Measurement (feet)	Availability
	Surface Casing	
9-5/8-inch O.D., 36-pound, K-55, 8 round thread, LT&C casing	330	Warehouse Stock
	Production Casing	
7-inch O.D., 23-pound, K-55, 8 round thread, LT&C casing (Bottom 400 feet will be rough coated)	6,000	Warehouse Stock
	Production Tubing	
4-1/2-inch O.D., 11.6-pound, J-55, 8 round thread, LT&C tubing	6,000	Warehouse Stock

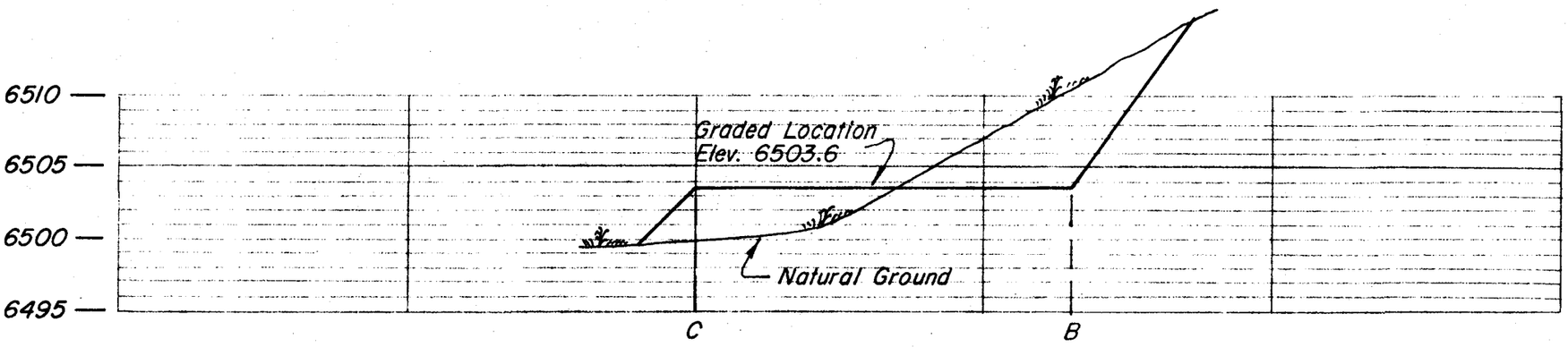
II. All ram type preventers will have hand wheels installed and operative at the time the preventers are installed.

III. Well responsibility - D. L. Reese or G. G. Francis



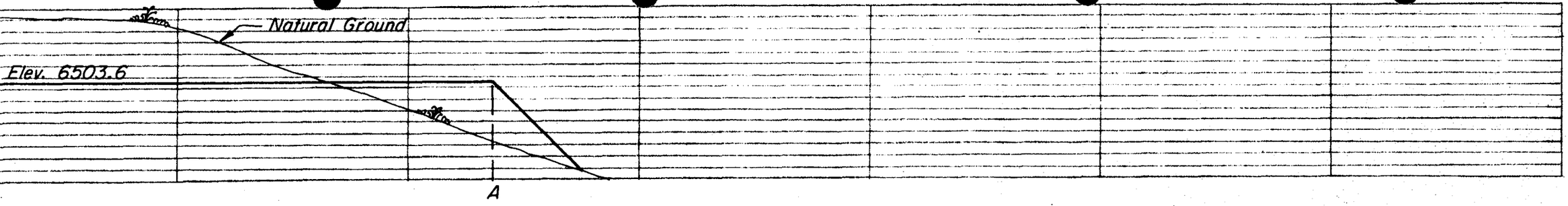


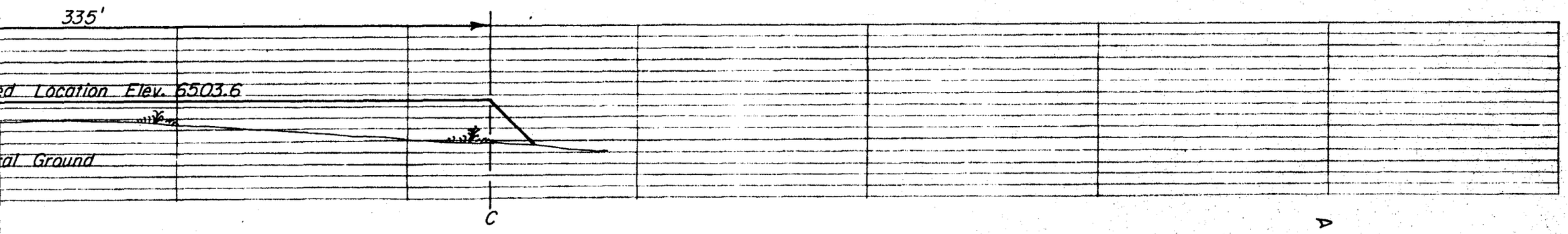


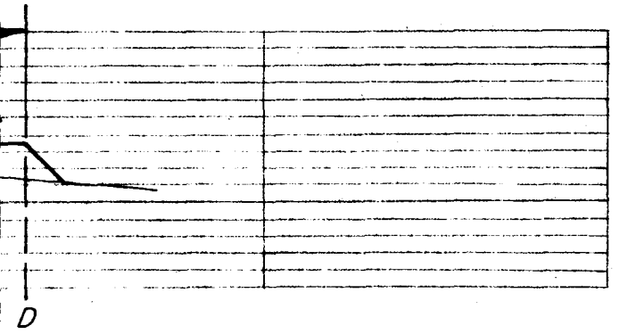


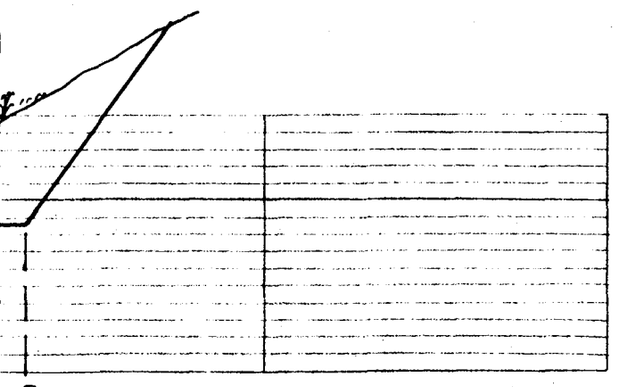
— PROFILE SECTIONS —
PROPOSED GRADED LOCATION

HORIZ. 1" = 50'
VERT. 1" = 10'

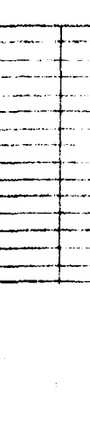


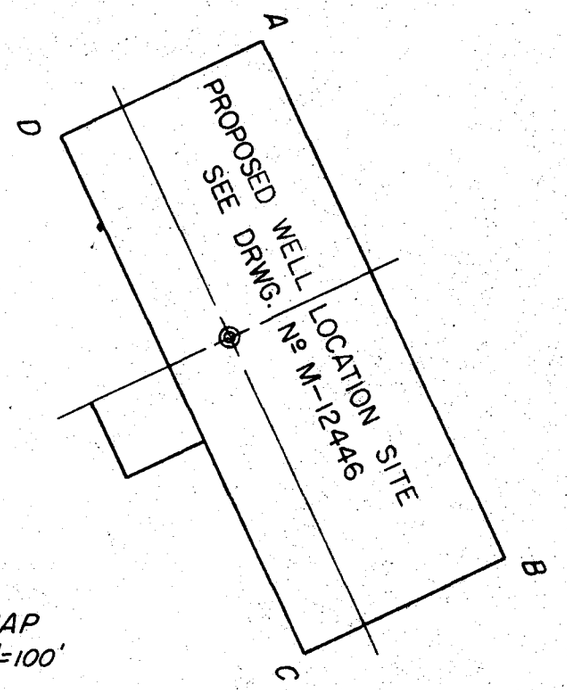






ONS —
OCATION





KEY MAP
SCALE 1"=100'

REVISIONS			
NO.	DESCRIPTION	DATE	BY

MOUNTAIN FUEL
RESOURCES, INC.

PROFILES
FOR
CLAY BASIN UNIT WELL Nº 32-S
WELL LOCATION SITE

DRAWN: 2-24-77 GeB | SCALE: AS NOTED
CHECKED: GeL
APPROVED: RWH
DRWG. NO. M-12447 | 2/2

FILE NO. A-11 SHEET 2 OF 2

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.: SLC 045051 a

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: -

1. OIL WELL ☐ GAS WELL ☐ OTHER: Gas Storage

7. UNIT AGREEMENT NAME: Clay Basin Gas Storage Agreement

2. NAME OF OPERATOR: Mountain Fuel Resources, Inc.

8. FARM OR LEASE NAME: Unit Well

3. ADDRESS OF OPERATOR: P. O. Box 1129, Rock Springs, Wyoming 82901

9. WELL NO.: 32-S

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 2193' FSL 478' FWL NW SW

10. FIELD AND POOL, OR WILDCAT: Clay Basin Gas Storage

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: NW SW 22-3N-24E

14. PERMIT NO.: API No.: 43-009-30023

15. ELEVATIONS (Show whether DF, RT, GR, etc.): KB 6525.25' GR 6503.60'

12. COUNTY OR PARISH: Daggett

13. STATE: Utah

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Supplementary history			X
(Other)			☐	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

TD 5925', spudded May 1, 1977, landed 9-5/8"OD, 36#, K-55, casing at 286.22' KBM and set with 180 sacks regular G cement treated with 3% calcium chloride, cement in place May 1, 1977, landed 7"OD, 23#, K-55, casing at 5907.01' KBM and set with 750 sacks 50-50 Pozmix treated with 2% gel, cement in place 5-11-77, rig released May 10, 1977.

18. I hereby certify that the foregoing is true and correct

SIGNED R. D. Myers TITLE Manager, Drilling and Petroleum Engineering DATE May 14, 1977

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER Gas Storage

2. NAME OF OPERATOR
Mountain Fuel Resources, Inc.

3. ADDRESS OF OPERATOR
P. O. Box 1129, Rock Springs, Wyoming 82901

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
2193' FSL 478' FWL NW SW

5. LEASE DESIGNATION AND SERIAL NO.
SLC 045051 a

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
-

7. UNIT AGREEMENT NAME
Clay Basin Gas Storage Agreement

8. FARM OR LEASE NAME
Unit Well

9. WELL NO.
32-S

10. FIELD AND POOL, OR WILDCAT
Clay Basin Gas Storage

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
NW SW 22-3N-24E

14. PERMIT NO.
API No.: 43-009-30023

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
KB 6525.25' GR 6503.60'

12. COUNTY OR PARISH
Daggett

13. STATE
Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Supplementary history			X
(Other)			☐	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

TD 5925', PBD 5849', rigged up completion tools on 5-16-77, perforated Dakota 5718' to 5752' with 2 jumbo jet shots per foot, set packer at 5618', landed 4-1/2" tubing at 5632.43', swabbed, flowed to atmosphere, shut well in, rig released May 20, 1977.

FINAL REPORT.

P-

RECEIVED
MAY 26 1977

18. I hereby certify that the foregoing is true and correct

SIGNED R. V. Myers TITLE Manager, Drilling and Petroleum Engineering DATE May 23, 1977

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

12

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☐ Other Gas Storage

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

2. NAME OF OPERATOR: Mountain Fuel Resources, Inc.

3. ADDRESS OF OPERATOR: P. O. Box 1129, Rock Springs, Wyoming 82901

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 2193' FSL 478' FWL NW SW
At top prod. interval reported below
At total depth

5. LEASE DESIGNATION AND SERIAL NO.: SLC 045051 a
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: -
7. UNIT AGREEMENT NAME: Clay Basin Gas Storage Agreement
8. FARM OR LEASE NAME: Unit Well
9. WELL NO.: 32-S
10. FIELD AND POOL, OR WILDCAT: Clay Basin Gas Storage
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: NW SW 22-3N-24E

API No.: 43-009-30023

14. PERMIT NO.	DATE ISSUED	12. COUNTY OR PARISH	13. STATE
-	-	Daggett	Utah

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
5-1-77	5-9-77	5-20-77	KB 6525.25' GR 6503.60	-

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
5925'	5849'		→	0-5925'	-

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 5718 - 5752' Dakota - gas storage

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Dual Laterolog, Compensated Densilog

27. WAS WELL CORED: No

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36	286.22'	12-1/4	180	0
7"	23	5907.01	8-3/4	750	0

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
4-1/2	5632.43'	5618'

31. PERFORATION RECORD (*Interval, size and number*)
5718-5752', jumbo jet, 2 holes per ft.

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
-	Flowing - Gas Storage	-

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
-	-	-					

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
-	-		-	-	-	

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*): -

TEST WITNESSED BY:

35. LIST OF ATTACHMENTS: Logs as above, Well Completion to be sent at a later date..

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED [signature] TITLE Manager, Drilling and Petroleum Engineering DATE May 23, 1977

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "*Sacks Cement*": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Log tops:		
Mancos	0'	
Frontier	5356	
Mowry	5547	
Dakota	5711'	

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683636

GP O 870-401

COMPLETION REPORT

Well: Clay Basin Unit No. 32-S Date: September 26, 1977

Area: Clay Basin Lease No: SL - 045051 a

☐ New Field Wildcat ☒ Development Well ☐ Shallower Pool Test

☐ New Pool Wildcat ☐ Gas Storage Extension ☐ Deeper Pool Test

Location: 2193 feet from South line, 478 feet from West line

NW ¼ SW ¼

Section 22, Township 3 North, Range 24 East

County: Daggett State: Utah

Operator: Mountain Fuel Resources

Elevation: KB 6525.25 Gr 6503.60 Total Depth: Driller 5925 Log 5906

Drilling Commenced: May 1, 1977 Drilling Completed: May 9, 1977

Rig Released: May 10, 1977 Well Completed: May 20, 1977

Sample Tops: (unadjusted)

Log Tops:

Mancos	Surface
Frontier	5356
Mowry	5547
Dakota	5711

Sample Cuttings:

Status: Gas storage injection-withdrawal well

Producing Formation: Dakota

Perforations: 5718-5752, jumbo jet, 2 holes per foot

Stimulation: None

Production: None reported

Plug Back Depth: 5849

Plugs: None

Hole Size: 12-1/4" to 300; 8-3/4" to 5925

Casing/Tubing: 9-5/8" to 286.22 w/180 sacks, 7" to 5907.01 w/750 sacks
4-1/2" to 5631.71 set in Baker FB-1 packer at 5618

Logging - Mud: None

Mechanical: Dual Laterlog (286-5905), Compensated Densilog (3900-5914)
Acoustic Cement Bond Log (3250-5843)

Contractor: Loffland Brothers

Completion Report Prepared by: M. L. Tomac

Remarks: API No. 4300930023

COMPLETION REPORT (cont.)

Well: Unit No. 32-S

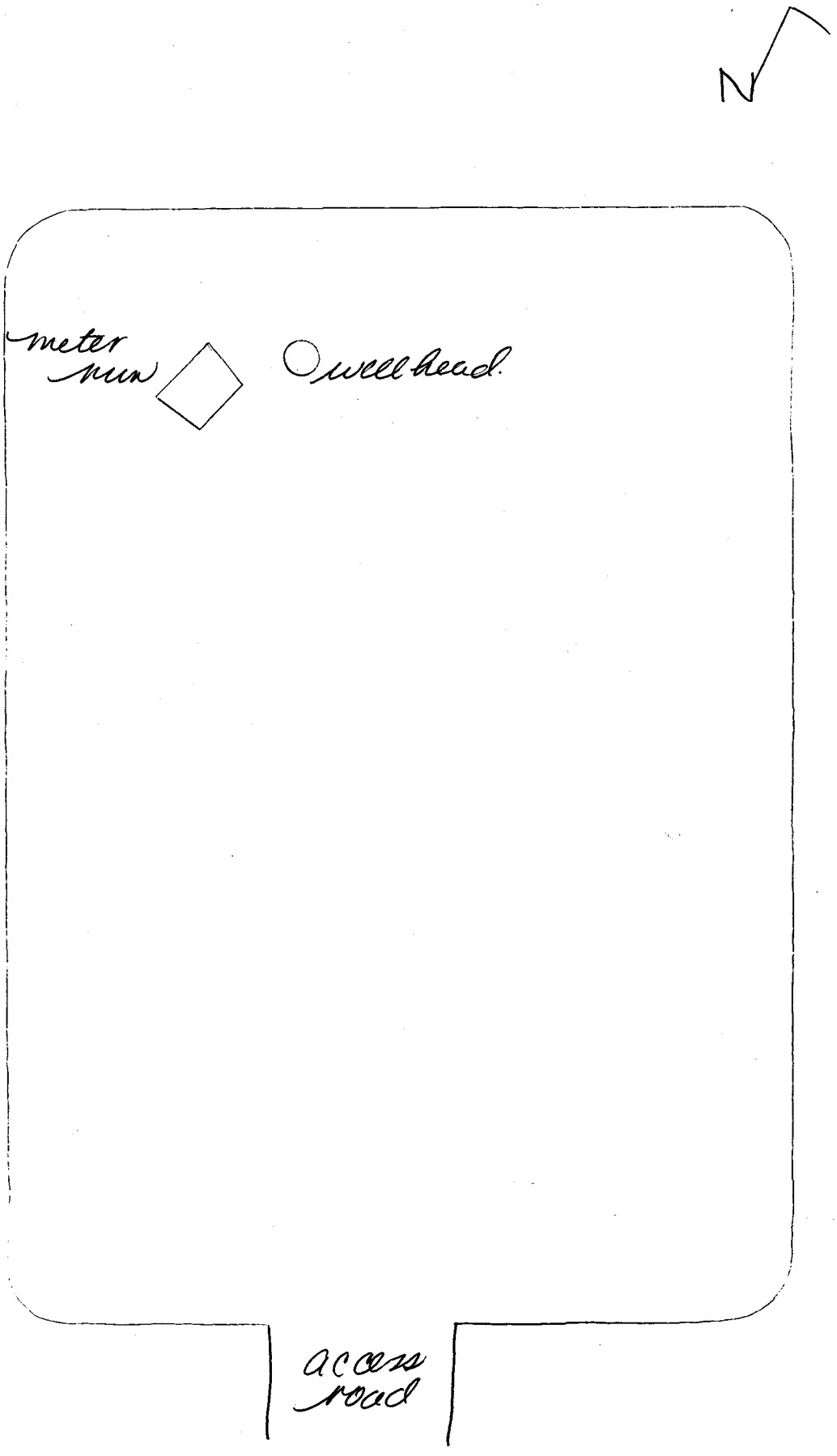
Area: Clay Basin

Cored Intervals (recovery): None

Tabulation of Drill Stem Tests: None

No.	Interval	IHP	IFP (min.)	ISIP (min.)	FFP (min.)	FSIP (min.)	FHP	Samples Caught	Remarks

Clay Basin U# 32 Sec 22, 31N, 24E | Uty 15 June 88



QUESTAR PIPELINE COMPANY

79 SOUTH STATE STREET • P. O. BOX 11450 • SALT LAKE CITY, UTAH 84147 • PHONE (801) 530-2400

June 23, 1988

CERTIFIED MAIL
RETURNED RECEIPT REQUESTED
#P 879 571 459

Bureau of Land Management
Utah State Office
CFS Financial Center
324 S. State Street
Salt Lake City, UT 84111-2303

Re: Name Change
Mountain Fuel Resources, Inc.
to Questar Pipeline Company

Gentlemen:

Enclosed for your files and information is a certified copy of the Articles of Amendment to the Articles of Incorporation of Mountain Fuel Resources, Inc. dated March 7, 1988, indicating that Mountain Fuel Resources, Inc. changed its name to Questar Pipeline Company.

Questar Pipeline Company holds interests in the following Federal Oil and Gas Leases in Utah:

No wells on gas field w/in CA – U-9712-A – Questar Energy Co. 100%
CA well – RT & OR's Mtn. Fuel Resources – U-011246 RT Asgmnt pending to "Questar Energy Co"
SLC-045051(A) } OR's
SLC-045051(B)
SLC-045053(A) } OR's
SLC-045053(B)
SLC-062508 – OR's
SLC-070555 – OR's
SLC-070555(A) – OR's
? Agreement No. 14-08-0001-16009
(Clay Basin Gas Storage Agreement) Vernal

Please note and adjust your records in accordance with the above and furnish verification of your receipt of this notice to the undersigned.

Sincerely,

J. B. Neese
Senior Landman

JBN/sdg

Enclosure

List of Leases

Overriding Royalties	Operating Rights
U-09712-A	SL-045051-A & B
U-011246	SL-045053-A & B
	SL-062508
	SL-070555
	SL-070555-A
	SL-045049-A & B

Clay Basin Gas Storage Agreement
Agreement No. 14-08-0001-16009

3100
U-09712-A
et al
(U-942)
C. Seare
3/9/89

DECISION

Questar Pipeline Company	:	Oil and Gas Leases
P.O. Box 11450	:	U-09712-A et al
Salt Lake City, Utah 84147	:	

Corporate Name Change Recognized

Acceptable evidence has been received establishing that Mountain Fuel Resources, Inc. has changed their name to Questar Pipeline Company. Accordingly, the surviving company, Questar Pipeline Company, is recognized as holding all interests in Federal oil and gas leases which were held by Mountain Fuel Resources, Inc. We are changing our records with respect to the attached listing of oil and gas leases. If there are any other leases that will be affected, please contact this office.

/s/ M. Willis
ACTING Chief, Minerals
Adjudication Section

Enclosure
List of Leases

cc: All District Offices, Utah
MMS, AFS
MMS, BRASS
920, Teresa Thompson
Clay Basin Unit File

CSeare:sl 3/9/89:1642f

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

ROUTING
1. GLH
2. CDW
3. FILE

Change of Operator (Well Sold) — Designation of Agent/Operator

X Operator Name Change — Merger

The operator of the well(s) listed below has changed, effective: **3/7/1988**

FROM: (Old Operator):	**TO:** (New Operator):
N1070-Wexpro Company PO Box 45360 Salt Lake City, UT 84145-0360 Phone: 1-(801) 534-5267	N7560-Questar Pipeline Company PO Box 11450 Salt Lake City, UT 84147 Phone: 1-(801) 530-2019

CA No. **Unit:**

WELL(S)

NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
CLAY BASIN UNIT 39-S	21	030N	240E	4300930030	1025	Federal	GS	A
CLAY BASIN UNIT 48-S	21	030N	240E	4300930044	1025	Federal	GS	A
CLAY BASIN UNIT 50-S	21	030N	240E	4300930046	1025	Federal	GS	A
CLAY BASIN UNIT 51-S	21	030N	240E	4300930047	1025	Federal	GS	A
CLAY BASIN UNIT 58-S	21	030N	240E	4300930054	1025	Federal	GS	A
CLAY BASIN UNIT 60-S	21	030N	240E	4300930056	1025	Federal	GS	A
CLAY BASIN U 11 (RD MURPHY 6-W)	22	030N	240E	4300915635	1025	Federal	GS	A
CLAY BASIN 28-S	22	030N	240E	4300930021	1025	Federal	GS	A
CLAY BASIN UNIT 32-S	22	030N	240E	4300930023	1025	Federal	GS	A
CLAY BASIN UNIT 36-S	22	030N	240E	4300930027	1025	Federal	GS	A
CLAY BASIN UNIT 54-S	22	030N	240E	4300930050	1025	Federal	GS	A
CLAY BASIN U 6 (RD MURPHY 3)	23	030N	240E	4300915630	1025	Federal	GS	A
CLAY BASIN U 10 (1 CL SPARKS)	23	030N	240E	4300915634	1025	Federal	GS	A
CLAY BASIN UNIT 29-S	23	030N	240E	4300930020	1025	Federal	GS	A
CLAY BASIN UNIT 31-S	23	030N	240E	4300930022	1025	Federal	GS	A
CLAY BASIN UNIT 44-S	23	030N	240E	4300930040	1025	Federal	GS	A
CLAY BASIN UNIT 45-S	23	030N	240E	4300930041	1025	Federal	GS	A
CLAY BASIN UNIT 57-S	24	030N	240E	4300930053	1025	Federal	GS	A
CLAY BASIN UNIT 41-S	26	030N	240E	4300930032	1025	Federal	GS	A
CLAY BASIN UNIT 42-S	26	030N	240E	4300930033	1025	Federal	GS	A
CLAY BASIN UNIT 43-S	26	030N	240E	4300930039	1025	Federal	GS	A

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 1/13/2004
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 1/13/2004
3. The new company was checked on the **Department of Commerce, Division of Corporations Database on:** 1/14/2004
4. Is the new operator registered in the State of Utah: YES Business Number: 649172-0142
5. If NO, the operator was contacted contacted on: ____

6. (R649-9-2)Waste Management Plan has been received on: IN PLACE

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: 3/9/1989

8. **Federal and Indian Units:**
The BLM or BIA has approved the successor of unit operator for wells listed on: n/a

9. **Federal and Indian Communization Agreements ("CA"):**
The BLM or BIA has approved the operator for all wells listed within a CA on: n/a

10. **Underground Injection Control ("UIC"** The Division has approved UIC Form 5, **Transfer of Authority to Inject,** for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: N/A

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database on:** 1/29/2004
2. Changes have been entered on the **Monthly Operator Change Spread Sheet on:** 1/29/2004
3. Bond information entered in RBDMS on: 1/29/2004
4. Fee wells attached to bond in RBDMS on: 1/29/2004
5. Injection Projects to new operator in RBDMS on: n/a

STATE WELL(S) BOND VERIFICATION:

1. State well(s) covered by Bond Number: 965003032

FEDERAL WELL(S) BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: 965002976

INDIAN WELL(S) BOND VERIFICATION:

1. Indian well(s) covered by Bond Number: n/a

FEE WELL(S) BOND VERIFICATION:

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number 965003033

2. The **FORMER** operator has requested a release of liability from their bond on: N/A
The Division sent response by letter on: N/A

LEASE INTEREST OWNER NOTIFICATION:

3. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: 1/29/2004

COMMENTS:

NEW ENTITY NUMBERS ASSIGNED FEBRUARY 2004

ACCT	OPERATOR NAME	API NUM.	Sec	Twnshp	Rng	WELL NAME	ENTITY	EFF DATE	REASON
N7560	Questar Pipeline Co	4300915629	20	030N	240E	Clay Basin Unit 5	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300915627	16	030N	240E	Clay Basin Unit 3	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930018	16	030N	240E	Clay Basin Unit 27-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930048	16	030N	240E	Clay Basin Unit 52-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930049	16	030N	240E	Clay Basin Unit 53-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930055	16	030N	240E	Clay Basin Unit 59-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930026	17	030N	240E	Clay Basin Unit 35-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930031	20	030N	240E	Clay Basin Unit 40-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930045	20	030N	240E	Clay Basin Unit 49-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300915626	21	030N	240E	Clay Basin Unit 2	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930015	21	030N	240E	Clay Basin 24-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930016	21	030N	240E	Clay Basin Unit 25-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930017	21	030N	240E	Clay Basin Unit 26-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930019	21	030N	240E	Clay Basin 30-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930024	21	030N	240E	Clay Basin Unit 33-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930030	21	030N	240E	Clay Basin Unit 39-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930044	21	030N	240E	Clay Basin Unit 48-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930046	21	030N	240E	Clay Basin Unit 50-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930047	21	030N	240E	Clay Basin Unit 51-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930054	21	030N	240E	Clay Basin Unit 58-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930056	21	030N	240E	Clay Basin Unit 60-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300915635	22	030N	240E	Clay Basin U 11 (RD Murphy	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930021	22	030N	240E	Clay Basin 28-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930023	22	030N	240E	Clay Basin Unit 32-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930027	22	030N	240E	Clay Basin Unit 36-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage

Note to file: These entity numbers were changed to compliment the operator correction from 3/7/98